

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**Cambridge International General Certificate of Secondary Education**

## **MARK SCHEME for the May/June 2015 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.

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### Section A

**1 Haney, Banks and Zimbardo conducted a simulation study on social roles during which participants were placed in a mock prison environment.**

**(a) Describe different types of observations.**

**[5]**

Any five correct points, 1 mark for each point up to a maximum of five points.  
Marks can be awarded for identifying features of observations but NOT strengths and weaknesses.  
No answer or incorrect answer, 0

Indicative content:

The different types of observations plus definitions

e.g. participant/non-participant

naturalistic/controlled

disclosed/undisclosed or covert/overt (do not award these twice – you can award disclosed + definition and then undisclosed + definition but do not then award covert/overt)

time/event sampling

structured/unstructured

Examples of observations – maximum 1 mark and must be a clear description of an observation from a study not just, e.g. Zimbardo

Award a maximum of 2 marks just for terminology without any definitions.

Any other appropriate point

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- (b) Design an alternative way to investigate social roles using the observational method and describe how it could be conducted. [10]**

Alternative does not need to take place in a prison.

Candidates should describe the who, where, when (duration), what and how.

Major omissions include the what and how. Candidates must describe what the participants are doing or are put through during the study and how the behaviours are recorded (e.g. behavioural checklist).

Minor omissions include who (number of participants), where and when (duration) (plus the what and/or how is unclear can also count as a minor omission).

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

Very unethical research must be capped at 4 marks.

Must measure social roles otherwise cap at 2.

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 social roles in methodological and ethical terms. [10]

Indicative content:

Candidates need 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:

- Difficulty in accessing a large sample of participants
- Lack of generalisability
- Could be unethical to do a study on someone within a prison environment
- Social desirability/demand characteristics if participants know they are being studied
- Difficult to compare participants as all unique
- Validity of data collection technique
- Reliability of data collection technique
- Ecological validity
- Ethics of observing participants without their consent
- Observer bias
- Difficulty in accessing a prison or other appropriate environment.

In order to achieve higher marks (5+) the candidate must link their points to their investigation described in part (b).

Candidates must discuss both **methodological** and **ethical** points to achieve 7+ marks.

To be considered specific to the investigation the response must be in context for a minimum of **two** separate points.

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 the investigation.	3–4
Evaluation is simplistic but specific to the investigation (may include general evaluation). May include one very detailed point.	5–6
Evaluation is good and specific to the investigation. Two or more points. This must include both a point on methodological as well as ethical issues.	7–8
Evaluation is detailed and directly relevant to the investigation and the observational method. Two or more points. This must include both a point on methodological as well as ethical issues.	9–10

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2 Baron-Cohen et al. (eyes test) conducted a laboratory experiment to investigate theory of mind in adults with autism and Asperger’s syndrome.

(a) What is meant by the term ‘control’? [2]

1 mark partial  
2 marks full

Possible response:

Consistency in the study – 1 mark

Extraneous variables are eliminated – 1 mark

Where the environment/procedure is kept consistent amongst all participants – 2 marks

Extraneous variables are eliminated as the situation (or equivalent) is kept consistent for all participants – 2 marks

(b) Describe one control from the Baron-Cohen et al. study. [3]

1–2 marks partial  
3 marks full (clearly explains why the feature is a control)

Possible response:

The eyes task – 1 mark

The 36 eyes shown to the participants where they had to judge emotion – 2 marks

The 36 eyes shown to the participants were the same for everyone and shown for a standardised period of time – 3 marks

Examples of controls could include – IQ tests, eyes task, words used in eyes task, timing of task, gender task given to AS/Autistic participants, control group (must be really clearly explained why this acts as a control as these participants are considered to the norm/the control of society in general).

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**(c) Discuss the extent to which the Baron-Cohen et al. study is reductionist. [10]**

Candidates may discuss findings/features of the study by Baron-Cohen et al. that are general and not specific to reductionism. Give a maximum of 2 marks to these candidates.

Appropriate comments could include linking reductionism to:

- Simplistic nature of IQ test (does not cover all types of intelligence)
- Simplistic nature of eyes task
- More complicated eyes task than previous studies (e.g. Sally Anne and other eyes task studies that had fewer eyes and fewer words to pick from)
- Complex conclusion made about mind blindness on the basis of a simplistic test
- Complex emotions are used as well as simple ones
- Limited nature of the sample makes the study reductionist OR uses both normal and Autistic/AS so more complex. Could be argued both ways
- Any other appropriate comment

No comment on reductionism.	0
Comment on reductionism which is muddled and weak.	1–2
Comment on reductionism which is not specific to the investigation OR consideration of reductionism which is simplistic but specific to investigation.	3–4
Consideration of reductionism which is simplistic but specific to investigation and somewhat detailed. This could include one point. OR Consideration of reductionism which is detailed but not specific to investigation.	5–6
Consideration of reductionism is good but brief (2 or more points) and specific to investigation. OR Consideration of reductionism with one issue which is detailed and directly relevant to the investigation and the other issue(s) is more simplistic.	7–8
Consideration of reductionism (2 or more points) which is detailed and directly relevant to the investigation.	9–10

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(d) Discuss the strengths and weaknesses of reductionist research using the Baron-Cohen et al. study as an example. [10]

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

Weaknesses

- Lacks ecological validity as reductionist
- Not a valid test of mind blindness as too simplistic
- A complete picture of autism is not given
- Fails to take into account other causes of behaviour

Strengths

- Often simplistic studies are more reliable and standardised
- Useful to use as a diagnostic tool as simple and quick
- An ethical test – could be because it was so simple
- Simple test for participants to complete so they should do it correctly
- A short test so participants more willing to complete
- Simplistic conclusions are easier to understand
- Reductionist research often collects quantitative data so can compare easily

Any other appropriate point

No comment on the strengths and weaknesses of reductionist research.	0
Comment given but muddled and weak.	1–2
Consideration of at least a strength and a weakness not specific to investigation OR Consideration of either a strength/weakness that is specific to reductionism 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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### Section B

- 3 (a) Outline what is meant by the term ‘ecological validity’ in psychology. [2]

1 mark partial, 2 marks full  
 Realism/true to life – 1 mark  
 How applicable a study is to everyday life – 2 marks.

Credit comments about generalisability to everyday life (but not points about generalisability of the sample)

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

**Nelson (children’s morals)**  
**Demattè et al. (smells and facial attractiveness)**  
**Schachter and Singer (emotion)**

- (b) Describe how one feature of each study lacks ecological validity. [9]

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

**Nelson:** The stories told to the children are not realistic because they are on paper and also very simplistic with little context given.  
 Another feature could include the rating scale given to the participants.

**Dematte et al.:** The smells and photographs are not how we experience attractiveness in everyday life. We see people in reality rather than a photo and there is a context to the situation we are in as well as a smell.

**Schachter and Singer:** Many features of this study lack ecological validity. We do not take injections of vitamins but rather tablets of vitamins. Although this was a lie told to participants they may not have believed it because it was unrealistic. Other features could include the behaviour of the stooge, the self report during the anger condition, the self report given at the end of the study.

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 ecological validity from the study. The description may be very brief or muddled.	1
Description of point about ecological validity 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 ecological validity from the study. A clear description that is in sufficient detail (an understanding of why the feature lacks ecological validity is given).	3
Max mark	9



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**(c) What advantages may psychologists have when they make studies ecologically valid?**  
**[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:

Realistic so can be applied to everyday life  
 Lack of demand characteristics/social desirability as participants believe in the situation  
 Useful research as relevant to everyday life  
 Observing behaviour that cannot be seen in a laboratory (e.g. behaviour at work, school, etc.)  
 Can offer valid explanations of behaviour  
 Can be quite easy to get a large sample if the study is just using people in their everyday environment

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 ecological validity OR a weak description of an advantage related to ecological validity and applied to a study.	2
Description of advantage related to ecological validity and applied to the study effectively.	3
Max mark	9

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4 (a) Outline what is meant by the term ‘ethnocentric bias’. [2]

1 mark partial, 2 marks full.

A distortion caused by a focus on the researcher’s own culture which narrows the appropriateness of the methods when used with participants from other cultures and causes a lack of generalisability of the finding to other cultures.

Accept a discussion about the ethnocentric nature of psychological materials.

Where the study uses a limited group of participants and the results cannot be generalised to the wider population – 1 mark

Where the researcher focuses on his own culture and is therefore unable to generalise his findings to other cultures – 2 marks

Judging other cultures based on your own cultural views (1 mark), so believing that your culture is superior to others (1 mark)

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

**Tajfel (intergroup categorisation)**  
**Piliavin et al. (subway Samaritans)**  
**Rosenhan (sane in insane places)**

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

**Tajfel:** Participants completed matrices of rewards of points to both in-group and out-group members. This was done after participants were told which group they belonged to (over/under estimator and Klee/Kandinsky).

**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.

**Rosenhan:** 8 pseudopatients went into 12 different hospitals in the USA. They observed the behaviour of the staff and patients in these hospitals and kept journals of their experiences. In addition, they asked the staff when they would be presented at the staff meeting and kept notes of the response of staff.

Candidates do not need to describe every feature of how the data were collected to obtain full marks.

For each study:	
No answer or incorrect answer.	0
Identification of point relevant to question but not related to study, or comment from study and 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 problems may psychologists have when they are ethnocentric in their research? [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:

Results are not valid/objective  
 Cannot be generalised to other cultures/types of people  
 Lowers the status of psychology  
 Results are not useful  
 Language and cultural problems  
 May lack reliability as you may not get the same results in another country

Or any other relevant problem.

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