#### **CAMBRIDGE INTERNATIONAL EXAMINATIONS**

GCE Advanced Subsidiary Level and GCE Advanced Level

# MARK SCHEME for the May/June 2013 series

# 9698 PSYCHOLOGY

9698/23

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 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.



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#### **Section A**

1 Nelson (children's morals) did a laboratory experiment to test the use of motives and outcomes when children make moral judgements. An alternative way to investigate morals is to do a field experiment, for example, in a playground.

### (a) Describe the laboratory experiment method and outline how it was used by Nelson. [5]

Any five correct points

1 mark for each point up to a maximum of five points

Can receive 2+3 marks. 2/3 for experimental method description and 2/3 for linking to Nelson's study.

No answer or incorrect answer, 0

Indicative content:

Takes place in a controlled environment.

Has an IV and a DV

There are two or more conditions

#### In the Nelson study -

Children were randomly assigned to three story presentation conditions.

Children were exposed to all four stories (good outcome/good motive, good outcome/bad motive, bad outcome/good motive, bad outcome/bad motive) = IV.

Children were either in the 3 year old group or the 7 year old group.

Participants completed a response scale. They made judgements of goodness by pointing to one of three smiling faces – from 'a little bit good' to 'very good'. Judgements made from a series of frowning faces – from 'a little bit bad' to 'very bad' = DV.

# (b) Design an alternative study to the Nelson study as a field experiment and describe how it could be conducted. [10]

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

Major omissions include the what, where and how. Candidates must describe the behaviour measured and how this data is collected. This description must give an indication of where the study was done. In addition, how is the data collected (e.g. via independent observers) and what data is recorded (e.g. what behaviour is being measured).

Minor omissions include who.

It is possible to achieve 9 marks with a small minor omission.

Alternative study is incomprehensible.	[0]
Alternative study is muddled and impossible to conduct.	[1–2]
Alternative study is muddled but possible.	[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 morals in ethical and methodological terms. [10]

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:

Ethics of a field experiment and/or ethics of studying morals.

Ecological validity of a field experiment

Poor/strong validity due to data collection method chosen in the field experiment

Good reliability if highly controlled or poor reliability if lacking in controls

Social desirability/demand characteristics if participants realise they are in an experiment

Strengths and weaknesses of qualitative/quantitative data collected

Researcher bias

Generalisability of sample

Any other appropriate point.

In order to achieve higher marks 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.

No evaluation.	[0]
Evaluation is muddled and weak.	[1–2]
Evaluation is simplistic and not specific to the investigation.	[3–4]
Evaluation is simplistic but 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 that discuss both methodological and ethical issues.	
Evaluation is detailed and directly relevant to the investigation.	[9–10]

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# 2 Held and Hein carried out a laboratory experiment on kittens to investigate depth perception.

### (a) What is meant by the term 'ethical guideline'?

[2]

[3]

1 mark partial

2 marks full

An ethical guideline is what is in place to protect participants in a psychology experiment – 1 mark.

An ethical guideline is what is in place to protect participants in a psychology experiment such as protection from harm and distress – 2 marks.

### (b) Describe how Held and Hein addressed <u>one</u> ethical guideline in their study.

1–2 marks partial

3 marks full

Indicative content -

'We found that subjects reared in this fashion (lightless cages) did not showing the freezing, agitation or fear responses."

The passive kittens rapidly recovered their skills fully once the study ended and they were given their "freedom".

Held and Hein did not "observe any signs of shock, excitement or fright" from the kittens.

Maximum of 1 mark to any ethical issue discussed that is not directly addressed by Held and Hein (e.g. informed consent).

Appropriate guidelines to discuss

Caging and environment

Harm and distress (e.g. social deprivation, interference in normal behavioural repertoire)

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## (c) Discuss the reliability and validity of the results from the study by Held and Hein. [10]

Appropriate points will be varied. These could include -

Reliability is good due to controls and standardised procedures

Validity –

Valid as using kittens with no visual experiences

Fairly good sample size as 10 pairs of kittens from different litters

Study is very scientific

Cannot generalise from animals to humans

Poor ecological validity of kitten carousel/visual cliff

No demand characteristics

No comment on reliability.	[0]
Comment given but muddled and weak.	[1–2]
Consideration of both reliability and validity but not specific to investigation <b>OR</b> Consideration of either reliability or validity but is simplistic but specific to investigations.	[3–4]
Consideration of both reliability and validity is simplistic but specific to investigations  OR Consideration of either reliability or validity which is detailed and specific to investigations.	[5–6]
Consideration of both reliability and validity which is good but brief and specific to investigations.	[7–8]
Consideration of both reliability and validity which is detailed and directly relevant to the investigation.	[9–10]

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(d) To what extent are human ethical issues relevant to research using animals? Use Held and Hein's study as an example in your discussion. [10]

#### Indicative content

Candidates are likely to consider the issues of

Harm and distress – no human or animal should be harmed. Although Held and Hein address this issue the kittens are still deprived of a normal environment during a part of their lives.

Cannot obtain consent and right to withdraw from kittens.

No need to keep results confidential with animals.

Not possible to give a debrief although it could be argued the animal should be returned to its natural state at the end of the study which would be a similarity.

No comment on ethics.	0
Comment on ethics is muddled and weak.	[1–2]
Comment on ethics which is not specific to the investigation <b>OR</b> Comment on one point regarding ethics which is simplistic but specific to investigation.	[3–4]
Consideration of 2+ points regarding ethics which is simplistic but specific to investigation <b>OR</b> Consideration of one point regarding ethics which is detailed and specific to investigation.	[5–6]
Consideration of 2+ points regarding ethics which is good but brief and specific to investigation.	[7–8]
Consideration of 2+ points regarding ethics which is detailed and directly relevant to the investigation.	[9–10]

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#### **Section B**

## 3 (a) Outline what is meant by the term 'generalisations' in psychology.

[2]

1 mark partial

2 marks full

Generalisations are possible where the study is realistic **or** has a good sample -1 mark. The extent to which one group's results can be applied to the general population -2 marks. The extent to which the situation in the study is realistic -2 marks.

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

Baron-Cohen et al (eyes test) Maguire et al (taxi drivers) Rosenhan (sane in insane places)

### (b) Describe a generalisation that can be made from each of these studies.

[9]

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

**Baron-Cohen:** All people with high functioning autism/Asperger's Syndrome lack empathy and are unable to recognise emotions in other people.

**Maguire:** Brain activation in the hippocampus of all taxi drivers is dependent on well established topographical knowledge.

**Rosenhan:** All psychiatric hospitals in the USA are not able to distinguish between the sane and insane.

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 generalisation from the study. The description may be very brief or muddled.	1
Description of point about generalisation 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 generalisation from the study. A clear description that is in sufficient detail.	3
	[max 9]

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# (c) What problems may psychologists have when they make generalisations from psychological 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:**

May be difficult to create studies that are ecologically valid.

May create unethical studies.

May be difficult to find a representative sample.

May be difficult to create a valid measuring device.

Participants may respond to demand characteristics if the study is unnatural.

Or any other relevant problem.

Marks per point up to a MAXIMUM of three points.	
No answer or incorrect answer.	0
Identification of problem.	1
Description of problem related to making generalisations  OR a weak description of a problem related to making generalisations and applied to a study.	2
Description of problem related to making generalisations and applied to the study effectively.	3
	[max 9]

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## 4 (a) Outline what is meant by the term 'ethnocentric bias' in psychology.

[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.

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

Mann et al (lying)
Billington et al (empathising and systemising)
Loftus and Pickrell (false memories)

## (b) Describe how the data were collected in each of these studies.

[9]

**Mann et al:** Behaviour of suspects was analysed. Clips of video footage was analysed and truthful and deceptive behaviours were compared. Two observers independently coded behaviours (gaze aversion, blinks, head movements, hand/arm movements, pauses, speech disturbances).

**Billington et al:** Participants were given questionnaire and performance measures of systemising and empathy. Given the EQ and SQ scales.

**Loftus and Pickrell:** Participants were asked to complete a booklet about their memories of the four events. They were then interviewed twice and asked to recall as much as possible about the events. Finally, the events paragraphs previously submitted were read to them and they had to rate clarity on a scale of 1 to 10 and then confidence on a scale of 1 to 5.

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 data collection. 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. A clear description that is in sufficient detail.	3
	[max 9]

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# (c) What problems may psychologists have when they try to avoid ethnocentric bias 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:**

Difficult to find a generalisable sample

Lowers validity of data collection method/findings

Researchers don't realise procedures are either irrelevant or impossible to complete by the participants

Experimenter bias in interpretation of the data

Leading questions

Social desirability/demand characteristics

Or any other relevant problem.

Marks per point up to a MAXIMUM of three points.	
No answer or incorrect answer.	0
Identification of problem.	1
Description of problem related to ethnocentric bias  OR a weak description of a problem related to ethnocentric bias and applied to a study.	2
Description of problem related to ethnocentric bias and applied to the study effectively.	3
	[max 9]