

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

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

## **MARK SCHEME for the October/November 2013 series**

### **9698 PSYCHOLOGY**

**9698/13**

Paper 1 (Core Studies 1), maximum raw mark 80

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.

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### Section A

**1 Mann et al (lying) say that it is hard to investigate the nonverbal behaviours accompanying deception.**

**(a) Explain why.** [2]

“because it is difficult to capture on tape people lying spontaneously where it is known for certain that they are lying, and at which point”

1 mark partial (either underlined reason), 2 marks full (both reasons).

Also accept other factors not from Mann et al.

verbal aspects might be distracting  
as difficult to judge, observer bias more likely

e.g. “It’s hard to know if they’re lying; and there would be demand characteristics in a lab study”

**(b) How did they overcome this problem?** [2]

They examined: videotapes of real criminals being questioned by police, using suspects who initially denied but later confessed to high stakes crimes, and studied videotapes of truthful and deceptive behaviour

1 mark partial (any 1 of 4 underlined ideas), 2 marks full (any 2 of 4).

their observers knew nothing about the aims

**2 From the study by Loftus and Pickrell (false memories):**

**(a) What were the participants told about the aim of the study before participating?** [2]

Information given to the participants (from the paper):

“Subjects were told that they were participating in a study on childhood memories, and that we were interested in **how and why people remembered some things and not others.**”

“...the kinds of things you may be able to remember from your childhood”

“...given a brief description of **four events that supposedly occurred while the subject and close family members were together.**”

“...they were asked to **complete the booklets** by reading what their relative had told us about each event, and then writing about what they remembered about each event. If they did not remember the event, they were told to write ‘I do not remember this.’”

1 mark partial (test of [childhood] memory), 2 marks full (any more correct detail).

‘past events’ = 1 mark

‘past events and memory’ = 2 marks

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**(b) What is meant by ‘informed consent’? [2]**

tells them enough about the study; to agree to participate.

1 mark partial (e.g. one of the two points above), 2 marks full – clear definition (e.g. both points above).

N.B. answer must say more than just ‘it is enabling participants to ‘consent’ once ‘informed’, although these words may appear in a 1 or 2 mark answer which also contains explanation.

**3 Baron-Cohen et al (eyes test) provided a glossary of 93 words to help the participants to identify mental states. List four of these words. [4]**

ACCUSING	DEFIANT	HOPEFUL	REGRETFUL
AFFECTIONATE	DEPRESSED	HORRIFIED	RELAXED
AGHAST	DESIRE	HOSTILE	RELIEVED
ALARMED	DESPONDENT	IMPATIENT	RESENTFUL
AMUSED	DISAPPOINTED	IMPLORING	SARCASTIC
ANNOYED	DISPIRITED	INCREDULOUS	SATISFIED
ANTICIPATING	DISTRUSTFUL	INDECISIVE	SCEPTICAL
ANXIOUS	DOMINANT	INDIFFERENT	SERIOUS
APOLOGETIC	DOUBTFUL	INSISTING	STERN
ARROGANT	DUBIOUS	INSULTING	SUSPICIOUS
ASHAMED	EAGER	INTERESTED	SYMPATHETIC
ASSERTIVE	EARNEST	INTRIGUED	TENTATIVE
BAFFLED	EMBARRASSED	IRRITATED	TERRIFIED
BEWILDERED	ENCOURAGING	JEALOUS	THOUGHTFUL
CAUTIOUS	ENTERTAINED	JOKING	THREATENING
COMFORTING	ENTHUSIASTIC	NERVOUS	UNEASY
CONCERNED	FANTASIZING	OFFENDED	UPSET
CONFIDENT	FASCINATED	PANICKED	WORRIED
CONFUSED	FEARFUL	PENSIVE	
CONTEMPLATIVE	FLIRTATIOUS	PERPLEXED	
CONTENTED	FLUSTERED	PLAYFUL	
CONVINCED	FRIENDLY	PREOCCUPIED	
CURIOUS	GRATEFUL	PUZZLED	
DECIDING	GUILTY	REASSURING	
DECISIVE	HATEFUL	REFLECTIVE	

1 mark per word × 4.

Ignore spelling/tense if word can be understood but do not accept synonyms

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**4 Held and Hein (kitten carousel) used observations to record the behaviour of the kittens.**

**(a) Describe one behaviour they assessed using observation. [2]**

Most likely:

- visually guided paw-placement: legs down onto table when lowered from above
- visual cliff: avoidance of deep side
- blink: to approaching object

1 mark partial (statement/name of test), 2 marks full (expansion = detail or example, can be brief as above).

N.B. pupil constriction to light is a physiological response, not a behaviour = 0 marks

**(b) Outline one disadvantage of observations as a research method. [2]**

Most likely:

- data indirectly from participant – must be seen/scored/recorded accurately by observer
- so (potential) loss of validity (/ limited, can't know why)
- e.g. kittens may have been more interested in something the researchers were unaware of across the shallow side
- relevant ethical issues
- social desirability (if human participants)
- researchers may unconsciously bias records in favour of their hypothesis

1 mark partial, 2 marks full (expansion = detail or examples, can be but does not have to be contextualised).

Accept points relevant only to humans.

Ignore points made suggesting that only qualitative, or only quantitative data are collected.

**5 Milgram (obedience) found that, of the forty participants involved, fourteen stopped between 300 volts and 375 volts, and twenty-six participants continued to 450 volts.**

**(a) Suggest one reason why some participants continued to 450 volts. [2]**

Most likely:

pressure of situation (lab, university; received payment),  
role of experimenter (scientist, authority figure, giving prods).

1 mark partial (just reason), 2 marks full (reason and explanation/example, e.g. named prods).  
in the agentic state/not in the autonomous state  
did not believe they were really giving shocks; so were not concerned about their actions

N.B. paid = 0 marks, but justification alone (of 'feeling obliged' may = 1)

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**(b) Suggest one reason why some participants stopped before 450 volts. [2]**

Most likely:

moral conflict too strong, despite pressures e.g. ingrained tendency not to harm other people.

1 mark partial (any 1 reason or example), 2 marks full (1 reason plus expansion or an example).

not in the agentic state/in the autonomous state

e.g. 'too distressed; e.g. seizures, bit lip' = 2

**6 Haney, Banks and Zimbardo conducted a prison simulation.**

**(a) Describe one way self report data were obtained in this study. [2]**

Most likely:

- rating scales: mood adjective checklists/for emotional changes/for interpersonal dynamics (= questionnaires: during study)
- individual difference scales: personality tests (before the study)/Comrey scale/indicate interpersonal behaviour style/F scale of Authoritarian personality/Machiavellianism/Cornell personality scale (subscales: trustworthiness, orderliness, conformity, activity, stability, extroversion, masculinity, empathy).

1 mark partial (e.g. naming test or type of test), 2 marks full (e.g. identifying test and describing how it collects data or what it measures).

mental health questionnaires, to check that the participants were mentally normal so that they would not be harmed by the study

experimenters kept informal diaries

guards made daily records of their shifts

interviews after end of study with prisoners and guards

**(b) Suggest one advantage of obtaining data through self report. [2]**

Most likely:

- data direct from participant: so likely to be (ecologically) valid
- lots of data: rich and full (so likely to be valid)

1 mark partial (advantage identified), 2 marks full (advantage which is explained).

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7 The study by Tajfel on intergroup categorisation was designed to investigate the origins of prejudice.

(a) How is 'prejudice' different from 'discrimination'? [2]

- prejudice refers to attitudes/beliefs
- discrimination refers to behaviour

1 mark partial (one term defined or weak distinction), 2 marks full.

(b) Explain whether Tajfel investigated prejudice or discrimination. [2]

discrimination

because he tested responses in competitions between groups/measured ingroup favouritism/scored preference towards own group

1 mark partial ('discrimination'), 2 marks full (reference to measuring behaviour, e.g. how the boys treated ingroup and outgroup members. Can be but does not have to be contextualised)

justification may be evaluative: because much easier to measure as observable

8 In the study by Freud, little Hans is asked 'when the horse fell down did you think of your daddy?'.

(a) Give one disadvantage with this type of questioning. [2]

Most likely: leading questions suggest an answer/produce bias making the findings invalid

1 mark partial (e.g. 'they suggest and answer', 'they are biased')

2 marks full (expansion = detail or example contextualised to little Hans) e.g. Hans would have given the answers he thought his father expected

(b) How did Freud interpret Hans' fear of horses? [2]

fear of his father/fear of castration

because horses have big penises

because the bridle looked like his moustache

1 mark partial (e.g. 'fear of father')

2 marks full (expansion = detail)

Oedipus complex = 1, + explanation relating to father = 2 marks

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**9 In study by Nelson on moral judgments, children of different ages were compared using an independent groups design.**

**(a) What were the two ages being compared? [2]**

3–4 year olds and 6–8 year olds

(accept any one of correct ages in each condition for 1 mark, one in each age bracket for 2 marks, e.g. 2 and 6 year olds = 1 mark, 4 and 8 year olds – 2 marks)

1 mark partial (one age correct), 2 marks full (both ages correct).

**(b) Outline one disadvantage of an independent groups design. [2]**

Most likely: with different participants in each condition, individual differences may mask or exaggerate the effects of the IV

1 mark partial, 2 marks full.

Needs more people = 1 mark

**10 From the study by Schachter and Singer (emotion):**

**(a) What are the two factors in the two-factor theory of emotion? [2]**

Arousal/physiological/biological component and cognitive/psychological component.

Name only required, 1 mark × 2

**(b) How was each factor manipulated in the study? [2]**

Arousal manipulated by injection/with adrenalin or placebo

Cognition manipulated by angry or euphoric situation

Cognition manipulated by information or misinformation

1 mark per factor, 1 mark × 2

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**11 From the study by Dement and Kleitman on sleep and dreaming:**

**(a) Outline two controls in this study.**

**[2]**

Most likely:

all eat normally but no alcohol or caffeine (= 1 control);  
 all have electrodes attached to head;  
 all woken by doorbell next to bed;  
 all used recording device next to bed;  
 Other appropriate answer acceptable.

1 mark per control × 2.

Do not accept manipulated variables, e.g.:

woken up after 5/15 minutes  
 woken in REM/nREM

N.B. answers relating to 'control condition' are incorrect = 0 marks

**(b) Give two reasons why it is important for studies such as Dement and Kleitman to use controls.**

**[2]**

Most likely:

- to maintain consistency between participants so raise reliability
- to ensure that they are measuring the intended variable(s) not extraneous ones, so raising validity

Answer does not have to be contextualised to Dement and Kleitman, but may be, e.g. because people are all physiologically the same so differences in physiological processes may be harder to identify

1 mark partial (2 brief or 1 detailed), 2 marks full.

**12 From the study by Maguire et al (taxi drivers):**

**(a) Identify and outline one independent variable from the study.**

**[2]**

Most likely:

Taxi drivers compared on:

- **topographical** task type: topographical (routes/landmarks) v nontopographical (film plots/film frames)
- **sequential** task type: sequential (routes/film plots) v nonsequential (landmarks/film frames)
- test (any of above) v **baseline** (speech output)

**1 mark partial (both levels/conditions of an IV identified)**, 2 marks full (identified and described – any pair of levels/conditions sufficient).

N.B. Taxi drivers/non-taxi drivers is incorrect

N.B. just one level, e.g. 'routes' is insufficient = 0 marks

accept semantic/non-semantic



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**(b) Identify and outline one dependent variable from the study.** [2]

Most likely:

PET scan result; (1 mark)

amount of brain activity/level of radioactivity (from colour on PET scan);

volume of hippocampus (left/right/anterior/posterior/body)

volume of grey matter

Also:

duration of speech (in seconds);

content of speech (in seconds);

1 mark partial (named), 2 marks full (name and outline).

'brain region activated' = minimum for 2

**13 Who were the participants in study 1 and study 2 from Rosenhan (sane in insane places)?** [4]

study 1: nurses and psychiatrists on wards

study 2: psychiatrists responsible for admissions

1 mark partial (e.g. non-specific clinicians),

2 marks full (e.g. as above)

study 1 = 2 marks, study 2 = 2 marks

**14 Thigpen and Cleckley studied multiple personality disorder.**

**(a) What is a 'case study'?** [2]

study of one individual

collecting in depth/detailed data ('a lot' of data is **not** the same)

using many different techniques (e.g. interviewing individual, relatives, observations, tests, etc.)

1 mark partial (e.g. 'study of one individual'), 2 marks full (study of one individual plus any correct expansion, e.g. 'in depth study of one individual' must be contextualised).

N.B. 'longitudinal'/'lasts a long time' is not necessarily the case so it not creditworthy as expansion

**(b) Explain one advantage of using the case study method in this investigation.** [2]

Most likely:

wanted to study MPD, which is rare (so studying one individual realistic);

wanted to study MPD, Eve was an interesting case (so could collect in depth data/ understand the source of her problem and help her)

provides basic information for further research

1 mark partial (e.g. first part of either line above), 2 marks full (must be contextualised, however briefly).

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15 The study by Veale and Riley (mirror gazing) was an experiment.

(a) Identify the two groups of participants being compared. [2]

BDD and controls

1 mark partial (only one group named), 2 marks full.

(b) The experiment was based on the findings of a pilot study. What is the purpose of a pilot study? [2]

to refine the procedure of a study  
to ensure that study will collect valid/relevant data  
to ensure that data will be reliable

1 mark partial (1 idea), 2 marks full (1 idea expanded or 2 ideas in brief).

N.B. it is not a test of ethics or to be sure that you will get the results you want.

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### Section B

16 Evaluate one of the studies listed below in terms of its contribution to the nature-nurture debate.

**Bandura et al (aggression)**

**Langlois et al (infant facial preference)**

**Billington et al (empathising and systemising)**

[10]

No marks for description of study.

Comment	Mark
No answer or incorrect answer.	0
Anecdotal evaluation, brief detail, minimal focus. Very limited range. Evaluation may be inaccurate, incomplete or muddled.	1–3
<i>Either</i> points illustrating the debate lack depth and/or breadth <i>or</i> only nature or nurture is considered. The answer is general rather than focused on study but shows some understanding.	4–5
Both sides of the debate are considered and argument is focused on the study although the evaluation may be imbalanced in terms of quality and/or depth. The answer shows reasonable understanding.	6–7
Balance of detail between nature and nurture and both are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

#### Bandura et al

- children imitated the aggression they observed – *nurture*
- children imitated same sex model more – could be influenced by *nature or nurture*
- girls – (somewhat) more verbal imitation – *nature* as born better linguists (*or nurture*)
- boys – imitated more physical aggression – could be influenced by *nature or nurture*
- aggression existed even in the absence of the model – possibly *nature*
- some new behaviours introduced, e.g. gun – could be *nature or nurture*
- comments on ‘not ladylike’ *nurture*
- needed to be frustrated – *nature*

#### Langlois et al

- young infants’ preference for attractive faces extends to females and male faces, black faces and infants’ faces all suggesting *nature*
- increased interest in black and infant faces dissipates quickly suggesting familiarisation so some aspects of *nurture* involved
- even at 6 months could be *nurture* – babies can learn

#### Billington et al

- empathising and systemising theory says females stronger E, could be *nature or nurture*
- intention to ‘need to redress balance’ of females in scientific disciplines implies belief it is/can be *nurtured*

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17 Discuss the extent to which generalisations can be made from psychological research using one of the studies listed below as an example.

**Milgram (obedience)**

**Piliavin et al (subway Samaritans)**

**Demattè et al (smells and facial attractiveness)**

[10]

No marks for description of study.

Comment	Mark
No answer or incorrect answer.	0
Anecdotal evaluation, brief detail, minimal focus. Very limited range. Evaluation may be inaccurate, incomplete or muddled.	1–3
Points illustrating generalisations lack depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4–5
Discussion of strengths/weaknesses/applications of generalisations are considered and argument is focused on the study although the evaluation may be imbalanced in terms of quality and/or depth. The answer shows reasonable understanding.	6–7
There is a balance of detail between strengths/weaknesses/applications of making generalisations and the discussion is focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

### Milgram

- the majority of people obeyed so can make generalisations
- Americans obeyed so can generalise beyond 'Germans are different'
- but may not generalise because socialisation differs between cultures
- and because some people disobeyed, so there are individual differences
- replicated widely since so can make generalisations
- based on narrow sample (men, American, small, etc.) originally, so initial generalisations potentially flawed
- importantly may not generalise to females
- based on lab study, how well does this extend to real life, so initial generalisations potentially flawed

### Piliavin et al

- field study attempted to replicate real situation so findings should generalise
- victims were black and white, so findings should generalise across ethnic groups
- **but** only one victim was black, three white and all were male, so may not generalise across ethnic group/gender
- field study was artificial, how well does this extend to actual situations, so initial generalisations potentially flawed

### Demattè et al

- highly controlled test, providing extensive, reliable data therefore should generalise
- design only tested females' attractiveness to males, therefore cannot generalise to attractiveness of smells for male heterosexuals or for homosexuals