

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

Cambridge International Advanced Subsidiary and Advanced Level

**MARK SCHEME for the October/November 2014 series**

**9698 PSYCHOLOGY**

**9698/12**

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.

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## Section A

## 1 In the study by Mann et al. (lying) several examples of 'speech disturbances' are given:

- (a) Give two examples of possible 'speech disturbances', these can include your own ideas. [2]

*Speech disturbances: (they were scored on the basis of a typed verbatim text) frequency of saying "ah" or "mmm," etc. between words, frequency of word and/or sentence repetition, sentence change, sentence incompleteness, stutters etc. ( $r = .97$ ).*

Accept any reasonable suggestions, e.g. 'er...', 'hmmm', stumbling over words, mumbling etc.

1 mark per example  $\times$  2

NB Do not accept 'pauses' (it is a separate category – of 'no speech')

NB Accept either 'stutter' or 'stammer' but not both

- (b) State the results for speech disturbances from the video clips of truths and lies. [2]

truthful: 5.22 (disturbances per 100 words)

deceptive: 5.34 (disturbances per 100 words)

50% increased in speech disturbances, 50% decreased

1 mark partial (1 accurate piece of information):

*either:* 1 accurate piece of data

*or:* the idea they were about the same

e.g. 'both truthful and deceptive data approximately equal'

e.g. no significant difference

2 marks full (2 accurate pieces of information):

*either:* idea they were about the same; plus 'disturbances per 100 words'

*or* both; about 5

2 The study by Held and Hein (kitten carousel) used apparatus called the 'visual cliff' to collect observational data.

- (a) What did observers record about the animals on the visual cliff? [2]

Whether they stepped/crossed/walked/descended over the **deep or shallow side**

2 marks for clear understanding that the kitten had a choice which was observed by seeing the kitten move to the deep or shallow side/discriminate

1 mark if any aspect unclear

NB If clear in context of results can award full marks.

NB Do not accept active/passive (it's the IV not the DV)

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**(b) Why was it difficult for the kittens to see the glass?** [2]

Because **both** patterned **surfaces** (30 cm and immediately underneath the glass) were **illuminated from below**.

'glass was clear'/'non-reflective glass'/transparent/see through = 1

2 marks for adding: material under the glass was illuminated from below (in both cases)/  
'patterned fabric'

1 mark if any aspect unclear

NB sloped edges is incorrect

**3 From the study by Milgram (obedience):**

**(a) State two characteristics of the voice of the experimenter when giving the verbal prods.** [2]

Firm = 1

Impassive = 1

Any synonym e.g. authoritative/assertive/commanding/stern = 1

not impolite = 1

male = 1 e.g. implied "his coat"

1 mark per aspect × 2

**(b) Describe the appearance of the experimenter.** [2]

male

31-year-old

stern appearance

(grey) technician's coat [accept 'lab coat', ignore 'white' if 'white lab coat' but do not accept 'white coat' unless qualified in some way e.g. 'to show authority']

1 mark per aspect × 2

[NB 'impassive manner' and 'biology teacher' are not appearance, so ignore. NB 'clip board' is in video but *not* in study, so ignore]

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- 4 Haney, Banks and Zimbardo (prison simulation) suggested that in real prisons prisoners have an intense hatred and disrespect for authority.

- (a) Using the results of the study, explain why real prisoners would feel this way. [2]

because the situational hypothesis says they will develop strategies to cope with being degraded/loss of identity and the differential in power, i.e. they *develop* reasons to hate the 'system' rather than (necessarily) being like that on incarceration.

1 mark partial (brief explanation or contextualisation)

e.g. indirect reference to situational factors (that could exist) in real prisons / contextualised example from Zimbardo / brief situational factor

2 marks full (brief explanation of situational hypothesis, with reference to study)

NB references to society putting them in prison are incorrect.

- (b) Describe one piece of evidence which supports your explanation in part (a). [2]

Many possible answers, any supporting pathological prisoner syndrome or pathology of power. Can be evidence described in terms of the way changes in individuals were *caused* (e.g. the prisoners felt *degraded* because they had to wear 'dresses' so felt less male) or *results* (prisoners *lost their identities* because they referred to themselves as numbers to the priest)

1 mark partial (brief description: e.g. evidence **or** effect)

2 marks full (expanded description: e.g. evidence and effect)

NB Mark (a) and (b) separately, to benefit the candidate, i.e. even if no marks in (a) but (b) relates to situational hypothesis (b) can earn marks.

- 5 From the study by Piliavin et al. (subway Samaritans):

- (a) State the sampling method and sample size. [2]

Opportunity sampling  
4450 subway users

1 mark for opportunity

1 mark for 4450 (approximately, accept any figure in the 4000s)

- (b) Suggest one disadvantage of this sampling method. [2]

Not representative  
so may not generalise to everyone  
e.g. people in New York/non-rush hour travellers/weekday travellers may be less/more helpful than elsewhere/rush hour/weekend travellers  
any named bias (with name and description could be 2 marks)

1 mark partial (brief description)

2 marks full (expanded description, may but does not have to, relate to study)

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**6 From the study by Tajfel (intergroup categorisation):**

**(a) What is meant by ‘attitudes’ in intergroup categorisation?**

**[2]**

prejudice/distinguishing between own and other groups  
judging own/the in-group to be better/more worthy

1 mark partial (brief explanation of attitudes or contextualised example or muddled explanation and example)

2 marks full (expanded explanation, with reference to intergroup categorisation e.g. by example)

NB references to discrimination/behaviours/awarding points are all **incorrect**

**(b) What behaviours did the boys in the study show which indicated intergroup discrimination?**

**[2]**

giving more points to members of their ‘group’  
maximising the difference between the points given to the in-group and the out-group.

1 mark per behaviour × 2

**7 In the study by Bandura et al. (aggression) the data were collected by observation.**

**(a) In the preliminary rating of aggressive behaviour, who were the observers?**

**[2]**

the experimenter and a nursery school teacher

1 mark experimenter

1 mark (nursery school) teacher

[accept ‘another person who was familiar with the children’]

**(b) In the experimental part of the study, where were the observers and why was this important?**

**[2]**

The observers were behind a one-way mirror [accept one-way glass but not two-way mirror]

So that they could see the children but the children couldn’t see them

So that the children (the children’s behaviour) were not affected by being observed

To avoid demand characteristics caused by the children knowing they were being observed

To reduce bias

To increase validity

1 mark partial (brief description)

2 marks full (expanded description, must relate to study – so ‘demand characteristics’ alone would not be sufficient)

NB ‘screen’ alone insufficient (in a different room)

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**8 In the study of little Hans, Freud refers to his 'libido'.**

**(a) What did Freud mean by 'libido'?**

**[2]**

A normally positive  
source of motivation/pleasure principle

1 mark 'motive'/'(sex) drive'/'energy'  
1 mark (normally) positive

**(b) Explain what Freud thought happened to Hans's libido during the course of the case study.**

**[2]**

It changed from motivating a love of his mother (and masturbation)  
to (in the phobia) an anxiety about her  
before being returned to normal

1 mark partial – an answer which either only partly explains the course of the libido, or  
muddles it with the rivalry with the father  
2 marks full – an answer which explains the course of the libido well/without confusion

'It caused him to be attracted to his mum' 1 mark

**9 From the study by Langlois et al. (infant facial preference):**

**(a) Describe the stimuli in study 3 and explain how they differed from those in studies 1 and 2.**

**[2]**

stimuli were coloured slides  
of 16  
3-month old  
male and female faces  
attractive/unattractive

**of babies, unlike studies 1 and 2 [= only difference]**

1 mark – statement of any feature from above  
2 marks – reference to babies rather than adults i.e. difference between studies 1 and 2, plus  
any other characteristic of the babies (including age)

NB can accept distinction between infants and adults, accept 'infants' with 'men and women'  
or 'infants' with 'males and females'.

**(b) What were the conclusions of study 3?**

**[2]**

That infants can discriminate between attractive and unattractive babies' faces  
and prefer attractive ones  
even though they have had little experience of seeing babies' faces

1 mark partial (brief conclusion e.g. 'infants prefer attractive babies' faces'),  
2 marks full (elaborated conclusion)

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- 10 Nelson investigated children's morals using an experiment. Alternatively, she could have used the case study method.**

**(a) Describe how an experiment and a case study are different.** [2]

participants: lots in an experiment, one in a case study  
 controls: lots in an experiment, none/few in a case study  
 data: typically quantitative in an experiment, qualitative in a case study  
 data: objective in an experiment, subjective in a case study  
 aim: to find causal relationship in an experiment, not *possible* in a case study

1 mark partial (brief description), 2 marks full (expanded description of one aspect or two aspects briefly)

NB longitudinal/snapshot is irrelevant

**(b) Explain why it was better to use an experiment in this study.** [2]

To obtain data from a **wide sample** to generalise from, so that conclusions could be drawn about children/moral development in general.

To **control** other variables, such as amount of information given about motive or consequence.

To manipulate the IV to see the effect of motives and outcomes on judgements of good and bad.

1 mark partial (explanation without reference to study, however detailed),

2 marks full (explanation with reference to study, however brief)

- 11 Prior to their study of sleep and dreaming, Dement and Kleitman gave instructions to their participants which acted as controls. State four of these controls.** [4]

arrive just before normal bedtime (accept at the time)

eat normally

no alcohol

no caffeine (containing drinks – accept coffee)

1 mark per control × 4

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**12 In the study by Maguire et al. the participants were taxi drivers.**

- (a) State two pieces of information relevant to the experimental tasks collected from the questionnaire.** [2]

areas of London with which they were most familiar  
 films they would rate as (very) **familiar** (from a list of 150 colour films)  
 individual landmarks (from a list of 20 world-famous ones) they had **visited** in person and could visualise (in their mind's eye)

1 mark per item × 2

NB handedness and years of experience were not on the questionnaire, so do not earn marks

- (b) What was known about the medical history of the taxi drivers?** [2]

none had any previous history of psychiatric or neurological illness (i.e. normal behaviour, normal brains)

1 mark partial (psychiatric/psychological *or* neurological mentioned)

2 marks full (psychiatric/psychological *and* neurological mentioned)

'They were psychologically normal' = 1 mark

'No mental illness and no brain damage' = 2 marks

**13 From the study by Demattè et al. (smells and attractiveness):**

- (a) Name and describe the experimental design used.** [2]

Repeated measures (within subjects)  
 same participants in each condition/level of the IV/every smell/both more and less attractive faces

1 mark partial (either named or described)

2 marks full (both)

NB All the participants do the same test/task = 0 (because this is standardisation)

- (b) Suggest one disadvantage of this design in this study.** [2]

Participants may experience order effects (practice/fatigue)  
 e.g. (even though there was clean air) they may have a residual effect from one smell to the next)

Participants are more likely to become aware of demand characteristics (and change their behaviour) e.g. work out that they 'should' prefer flowery/Gravity smelling men

1 mark partial (disadvantage described without reference to study, however well)

2 marks full (disadvantage plus reference to study, however brief)



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**14 From the study by Rosenhan (sane in insane places):**

**(a) Explain why the study was done.**

**[2]**

To see whether it is possible to distinguish the sane from the insane in a hospital context  
 To see whether context affects diagnosis/clinical opinion  
 To test the validity of diagnosis  
 To test the stickiness of labels  
 1 mark partial (limited explanation/not related to study)  
 2 marks full (clear explanation, related to study)

To see if psychiatrists can tell the sane from the insane = 1 mark

**(b) Explain what Rosenhan did to ensure the results would generalise to other hospitals.**

**[2]**

used (12) different hospitals/pseudopatients sent to different hospitals  
 in different states (East and West coast)  
 old (and shabby)/new = 2 marks  
 good/poor staff-patient ratios = 2 marks  
 private/state/university funded (at least 2 named = 2 marks)

lots of different hospitals = 1 mark

old hospitals and ones with state funding = 1 mark (allow 1 point only for 'half' a variation)

**15 Veale and Riley studied mirror gazing in body dysmorphic disorder (BDD) patients.**

**Describe two goals of mirror use that the BDD patients were encouraged to develop.**

**[4]**

Patients (whether they are gazing or avoiding) are encouraged to develop the following goals:

1. To use mirrors at a slight distance or ones that are large enough to incorporate most of their body;
2. To deliberately focus attention on their reflection in the mirror rather than an internal impression of how they feel;
3. To only use a mirror for an **agreed function** (e.g. shaving, putting on make-up) for a limited period of time;
4. To use a variety of different mirrors and lights rather sticking to one which they "trust";
5. To focus attention on the whole of their face or body rather than a specific area;
6. To suspend judgement about one's appearance and distance oneself from automatic thoughts about being ugly or defective;
7. Not to use mirrors that magnify their reflection;
8. Not to use ambiguous reflections (for example windows, the backs of CDs or cutlery or mirrors that are dusty or cracked);
9. Not to use a mirror when they feel have the urge but to try and delay the response and do other activities until the urge has diminished.

NB 'to use the mirror less' = 0 marks

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## Section B

16 Evaluate one of the studies listed below in terms of its validity.

Loftus and Pickrell (false memories)

Tajfel (intergroup categorisation)

Schachter and Singer (emotion)

[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 strengths and weaknesses in terms of validity lack depth and/or breadth <i>or</i> only strengths or weakness are considered. The answer may be general rather than focused on the study but shows some understanding of validity.	4–5
<b>Both</b> strength(s) and weakness(es) in terms of validity are considered and are focused on the study although they may be imbalanced in terms of quality and/or depth. The answer shows good evaluation with reasonable understanding.	6–7
Balance of detail between strengths and weaknesses in terms of validity and both are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

#### Loftus and Pickrell

- *validity strengths*: lab/controlled e.g. filler paragraphs (many others possible)
- standardisation e.g. always third story
- *validity weaknesses*: may actually have been lost in a mall
- may have talked to relatives

#### Tajfel

- *validity strengths*: lab/controlled e.g. certain that boys didn't know who was in 'own' group (many others possible)
- standardisation e.g. matrices had fixed relationships so DV could be measured consistently
- *validity weaknesses*: may not have felt the situation was real (as boys not generally asked to count dots/rate artists)
- findings only based on young boys so may not apply to females (less competitive, which matters) or older males (more testosterone than at 14, so more competitive)

#### Schachter and Singer

- *validity strengths*: lab/scripted e.g. stooge behaviour was consistent so valid comparison between participants and between conditions (many others possible)
- many controls in design, e.g. different kinds of control groups (ignorant v. informed, placebo v. real)
- *validity weaknesses*: may not have felt the situation was real (e.g. questions on questionnaire were excessive) many other points possible
- findings only based on males so may not apply to females, especially as females respond to emotional situations differently from males.

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17 Use one of the studies listed below to discuss the strengths and weaknesses of the use of psychometrics in psychology.

Baron-Cohen et al. (eyes test)

Thigpen and Cleckley (multiple personality disorder)

Billington et al. (empathising and systemising)

[10]

No marks for description of study.

Comment	Mark
No answer or incorrect answer.	0
Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled. May evaluate the study itself, making only indirect or serendipitous reference to psychometrics in general.	1–3
<i>Either</i> points are limited to illustrating strengths or weaknesses of psychometrics without reference to the study <i>or</i> lack of depth and/or breadth. The answer shows some understanding.	4–5
<b>Both</b> strengths and weaknesses of psychometrics are considered and are focused on the study although they may be imbalanced in terms of quality or quantity. The answer shows good discussion with reasonable understanding.	6–7
Balance of detail between strengths and weaknesses of psychometrics and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8–10

Examples of possible discussion points:

#### Baron-Cohen et al.

- *strengths of psychometrics*: reliable measures because can be retested to demonstrate consistency e.g. IQ
- valid measures because can be compared to similar measures to demonstrate whether they are detecting appropriate characteristics e.g. ET revision
- *weaknesses of psychometrics*: only give quantitative data, e.g. eyes test cannot tell extent of empathy, only whether emotional state has been recognised
- some measures, such as IQ tests, may only measure a limited range of the intended variable, e.g. what about creative intelligence or specific intelligences?

#### Thigpen and Cleckley

- *strengths of psychometrics*: reliable measures because can be retested to demonstrate consistency e.g. IQ
- valid measures because can be compared to similar measures to demonstrate whether they are detecting appropriate characteristics e.g. different elements of WAIS (verbal and performance)
- *weaknesses of psychometrics*: only give quantitative data, e.g. Weschler memory test assess many facets of memory but not details of the individual's autobiographical memory
- some measures, such as IQ tests, may only measure a limited range of the intended variable, e.g. what about creative intelligence or specific intelligences?

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**Billington et al.**

- *strengths of psychometrics*: reliable measures because can be retested to demonstrate consistency e.g. embedded figures
- valid measures because can be compared to similar measures to demonstrate whether they are detecting appropriate characteristics e.g. ET revision
- *weaknesses of psychometrics*: only give quantitative data, e.g. eyes test cannot tell extent of empathy, only whether emotional state has been recognised
- some variables, such as empathising, are about emotions and as such may need qualitative data to express differences effectively