

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

Cambridge International Advanced Subsidiary and Advanced Level

**MARK SCHEME for the May/June 2015 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.

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### Section A

**1 One ethical issue in the study by Mann et al. (lying) was the sensitive content of the video clips because they were suspects of crimes:**

**(a) Outline one practical problem caused by this ethical issue. [2]**

Because of the sensitive nature of the video clips it was essential that as few people as possible outside the police viewed the tapes  
Which meant testing reliability (of the coders) was a problem.

1 mark partial (brief/muddled), 2 marks full (some detail)

**NB** consent is an ethical not a practical issue so 0 marks

**(b) Describe how Mann et al. overcame this problem. [2]**

The second coder did not see all of the tapes  
They only coded a sample of those seen by the first coder (and the inter-coder reliability was high, so the second coder didn't see any more tapes)  
36 clips, 1 of each suspect

1 mark partial (brief/muddled), 2 marks full (some detail)

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

**Describe two features of the interviews.**

**[4]**

scheduled two interviews (by telephone)  
 (if convenient) interviews done at university (face to face) or (most) by telephone  
 first interview 1–2 weeks after booklet arrived, second interview 1–2 weeks after first interview  
 (at start) reminded of 4 stories and asked to recall as much about them as they could  
 (regardless of whether they had recorded the detail in their booklet).  
 Told aim was to see how much detail they remembered and compare it with their relative.  
 Parts of event paragraphs read (how) to them to act as retrieval cues (function) (of prompting).  
 After retrieval they were asked to rate clarity  
 1 (not at all clear) – 10 (extremely clear)  
 then rate confidence (in ability to recall more details if given more time)  
 1 (not confident) – 5 (extremely confident)  
 interviewers were pleasant and friendly but pressed for details  
 After first interview: thanked for time, asked to think about event, try to recall more and not to talk  
 to anyone about it  
 After second interview: explained about false event, apologised for deception, explained why  
 necessary.

A 'feature' could be:

scheduling (e.g. how many, when, where, how)  
 how conducted (face to face v phone)  
 first versus second interview (e.g. when, time lag)  
 prompting (e.g. how, function)  
 clarity rating (e.g. what, when, how)  
 confidence rating (e.g. what, when, how)  
 interviewers (manner, behaviour)  
 post first interview instructions (think, try to recall more, not to talk to anyone)  
 debrief (post second interview, explanation about false event, apology for deception, explanation  
 of why necessary).

The detail and accuracy will determine 1 or 2 marks  
 2 marks per feature **X2**

**NB** must be two 'features', not just list of general simple points (if so, just award two partial marks)

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**3 From the study by Baron-Cohen et al. (eyes test):**

- (a) Describe where the participants did the eyes test. [2]**

In a (quiet) room, in Cambridge/Exeter

1 mark partial (brief/muddled), 2 marks full (as above)

**NB** In a lab is incorrect = 0 marks

- (b) Outline two other tasks that some of the participants were asked to complete. [2]**

(The AS/HFA group also) judged the **gender** of each person on the photo  
 (Groups 1, 3 and 4 also completed the) **AQ** (Autism Spectrum Quotient questionnaire)  
 read through the **glossary** (and indicated any meanings they were unsure of)  
**IQ** test / WAIS-R (group 1)

1 mark partial (only 1 idea or muddled), 2 marks full (2 clear ideas)

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

- (a) Describe the sample electric shock given to the participant. [2]**

A (single) 45 V shock  
 on the wrist  
 using the third switch  
 from a battery (wired into the generator)

1 mark partial (brief/muddled), 2 marks full (some detail)

- (b) Explain why this was necessary. [2]**

So they believed the situation/apparatus was **real**  
 is that it was likely to be a **valid test of destructive obedience** (i.e. why seeming real is important)

1 mark partial (brief/muddled), 2 marks full (key detail as bold)

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5 From the study by Haney, Banks and Zimbardo (prison simulation):

- (a) Give two reasons why the prisoners were given uniforms. [2]

To reduce their identity, so that they would conform to the role  
 To emasculate them, so that they would accept the guards' authority  
 To make it more real/authentic/believable

1 mark (1 reason), 2 marks (2 reasons)

**NB** max 1 for 'to create authority'

- (b) For one of these reasons, choose an item of the uniform and explain how it served that function. [2]

Reduce identity: smock with number – so didn't use their own name.  
 Emasculate: smock: no underwear/trousers – so forced to sit like women

1 mark partial (brief/muddled e.g. if only linked to 'being realistic')  
 2 marks full (some detail e.g. if linked to identity/emasculatation)

6 Following the study by Bandura et al. (aggression), an interesting comparison would be between a neutral aggressive model and a feared aggressive model.

- (a) Suggest one control that could be used in a study comparing neutral and feared models. [2]

For example:

*appearance*: the aggressive model mustn't look nastier (or nicer) than the feared model

*familiarity*: the feared model should not be someone well-known unless the other model is too.

1 mark for (sensible) control (look at the justification in (b) to give credit in (a) if in doubt)  
 1 mark for detail (e.g. explanation of why the control matters or how it could be done)

**NB** Also accept general controls, e.g. 'see for same length of time'

- (b) Describe an ethical guideline that would be relevant to the proposed study. [2]

Most likely

*Protection from harm*: making sure the children were not frightened **more than they would be in normal life**

*Right to withdraw*: let the children know they can leave at any time, e.g. if they are frightened.

*debrief*: Reassure the children afterwards so they have not been negatively affected by the study.

1 mark partial for naming a relevant guideline or describing a relevant problem that would be tackled by a guideline.

2 marks full – name and description of guideline, which may be achieved through contextualisation.

7 From the study by Nelson (children’s morals):

(a) Describe the results for the variable of good/bad motive.

[2]

MEAN RATING OF ACTOR'S GOODNESS/BADNESS IN STUDY 1 AS A FUNCTION OF SUBJECTS' AGE, LEVEL OF MOTIVE, AND LEVEL OF OUTCOME

	3-Year-Olds (N = 60)		7-Year-Olds (N = 30)	
	Good Motive	Bad Motive	Good Motive	Bad Motive
Good outcome.....	6.55	2.27	6.20	3.46
Bad outcome.....	4.17	1.60	4.47	1.56

Overall means:  
good motive = 5.35  
bad motive = 2.22

3 and 7 year-old children make use of motive information to make moral judgments (when this information is explicit/salient/available)  
so 3 and 7 year olds are not very different  
(although both are more influenced by bad motives)

1 mark partial (brief/muddled), 2 marks full (clear statement)

**NB** Do not necessarily need data for 2 marks, but this is one way to add detail

(b) Describe the results for the variable of implicit/explicit motive.

[2]

MEAN RATING OF ACTOR'S GOODNESS/BADNESS IN STUDY 2 ACCORDING TO PRESENTATION MODE, OUTCOME, AND MOTIVE

PRESENTATION	GOOD OUTCOME		BAD OUTCOME	
	Good Motive	Bad Motive	Good Motive	Bad Motive
Verbal only.....	6.11	3.56	2.67	1.78
Picture-motive implicit....	7.00	2.11	2.33	1.11
Picture-motive explicit....	7.00	3.56	4.22	1.11

Children use **motive** information when this information is **explicit**/salient/available  
Children more likely to judge by motive when it is explicit, though only for bad motive with good outcome and good motive when bad outcome, i.e. when there is a conflict between motive and outcome (**non-congruence**)

1 mark partial (brief/muddled), 2 marks full (some elaboration)

**NB** Do not necessarily need data for 2 marks, but this is one way to add detail

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

**(a) Describe how the qualitative data were collected by self-report. [2]**

open ended questions  
 asking participants to describe physical/emotional sensations experienced during the experiment

1 mark partial (brief/muddled), 2 marks full (some elaboration)

**NB** Questionnaire to arouse anger is irrelevant

**(b) Describe one strength of collecting qualitative data in this study. [2]**

Allows participant to give true/valid answer  
 – so participant not forced to choose when their experience of a complex emotion like euphoria/anger may be different from choices given

1 mark for a strength (however detailed)  
 2 marks for a contextualised strength (however brief)

**9 Dement and Kleitman measured dream duration and the number of words used in dream narratives.**

**(a) Describe the relationship they were expecting and what they found. [2]**

Expecting a (positive) correlation  
 and found one (r values 0.4 to 0.71).

1 mark partial (either expectations or findings, however detailed)  
 2 marks full (both expectations and findings, however brief – does not need data)

**(b) Explain the results you have described. [2]**

The longer you spend in **REM** sleep, the longer your dream will be so you will have more to say about it.

1 mark partial (brief/muddled),  
 2 marks full (clear explanation with reference to REM)

**NB** If answer to (b) is the same as (a) it is not an explanation, so 0 marks

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10 In the study by Maguire et al. (taxi drivers) a control task was compared to a routes task.

(a) Outline both of these tasks. [2]

*Control:* speech output, from repeating (two 4–digit) numbers

*Routes:* topographical sequencing task, describe route between two points (in London).

1 mark partial (either control or routes task described)

2 marks full (control and routes tasks described)

(b) Name two areas of the brain that are activated in the routes task. [2]

*routes task activation:* extrastriate cortex, medial parietal lobe, posterior cingulate cortex, parahippocampal gyrus, right hippocampus

1 mark per correct area

11 In the study by Demattè et al. (smells and facial attractiveness) counterbalancing was used.

(a) Describe what is meant by counterbalancing. [2]

Presenting each possible order of the conditions of the IV to different participants.

1 mark partial (brief/muddled), 2 marks full (clear, accurate definition)

(b) Explain why counterbalancing was necessary in this study. [2]

To avoid order effects (in a repeated measures design) – so in this experiment they didn't have the effect of one smell influencing their judgment of attractiveness on the next trial

1 mark partial (reason without reference to this study)

2 marks full (reason with reference to this study)

**NB** No marks for just saying 'because they were the same participants', because this is description not explanation



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**12 In the study by Rosenhan (sane in insane places), each pseudo-patient had to get themselves discharged from the mental institution.**

**(a) Describe how the pseudo-patients were instructed to achieve this by Rosenhan. [2]**

By demonstrating to the staff that they were sane  
i.e. stopped reporting an symptoms  
e.g. by co-operating with staff/any example of co-operating (max 1 mark for an example)

1 mark partial (brief/muddled)  
2 marks full (clear, accurate definition)

**(b) Identify two behaviours of the pseudo-patients that contributed to their discharge. [2]**

Nursing reports said they were friendly/co-operative/exhibited no abnormal behaviours  
They (pretended to) take the drugs they were given  
They joined in with hospital activities

1 piece of evidence = 1 mark **X2**

**13 From the study by Thigpen and Cleckley (multiple personality disorder):**

**(a) Describe the relationship that Eve White had with her parents and Eve Black had with her parents. [2]**

Eve White admitted 'difficulty in her relationship with her mother' and being bewildered by punishments for misdemeanours she could not recall.  
Eve Black had a 'strong feeling of rejection by her parents, especially after the birth of her twin sisters'.

1 description of relationship = 1 mark **X2**

(Eve White and Eve Black) both had bad relationships with the parents = 2 marks

**(b) Describe how the information about these relationships was obtained. [2]**

Most likely:  
*interview*: over 100 hours of interviews with different personalities, plus with husband, parents.  
*hypnosis*: to reveal Eve Black and be able to access her repeatedly

1 mark partial (brief/muddled)  
2 marks full (some elaboration e.g. either of above)

**NB** There are many possible correct answers to this question. Marks are for description not identification of how.

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**14 From the study by Billington et al. (empathising and systemising):**

**(a) Describe what was meant by the ‘affective component of empathising’.** [2]

‘The affective component of empathizing involves an emotional response that arises as a result of the comprehension of another individuals emotional state’

**understanding** someone else’s emotional/mental state that leads to an appropriate **emotional** response

1 mark partial (brief), 2 marks full (some detail)

**(b) Describe the participants who were ‘extreme empathisers’.** [2]

All female  
2% from humanities, 0.5% from physical sciences.

1 mark partial (brief), 2 marks full (with some data)

female. 1 mark (NB ignore ‘Most were’)  
Most were humanities students. 1 mark

**15 In the study by Veale and Riley it was found that body dysmorphic disorder (BDD) patients had a different focus of attention during long mirror gazing sessions than the controls.**

**Describe two of these differences in focus of attention.** [4]

‘For a long session in front of the mirror BDD patients were more likely than controls to focus their attention on an internal impression or feeling (rather than their external reflection in the mirror) but *not* for a short session. BDD patients were also more likely to focus their attention on specific parts of their appearance during a long session (rather than the whole of their appearance) (see Table 1).’

BDD more likely to focus on an **internal** (impression or feeling) than their external (**reflection** in the mirror)

(BDD –0.49, controls –2.2)

BDD more likely to focus on **specific parts** than their **whole appearance**

(BDD 70.5, controls 44.5)

1 mark partial (brief e.g. only ‘half’ of point)

2 marks full (comparison may include data but does not have to)

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### Section B

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

Piliavin et al. (subway Samaritans)

Freud (little Hans)

Veale and Riley (mirror gazing)

[10]

No marks for description of study.

Description of weaknesses and evaluation of weaknesses are creditworthy; either approach, or a combination, can earn full marks.

Max 5 if only one weakness or just a list of weaknesses identified.

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
<b>Either</b> points illustrating weaknesses of the study lack depth and/or breadth <b>or</b> only one weakness is considered. The answer is general rather than focused on study but shows some understanding.	4–5
<b>Two or more weaknesses</b> of the study 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
Good detail for at least two weaknesses and these are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

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Examples of possible evaluation points:

**Piliavin et al.**

- the study has ethical issues as the participants were unaware that they were in a study and may have been distressed by what they saw. They were not (all) debriefed.
- quantitative data cannot provide such a good insight into the reasons behind behaviours (i.e. why some people helped and others didn't) as qualitative data.
- the sample was large but consisted only of those people travelling at non-peak times, and those travelling at other times may have responded differently (e.g. may have been younger, busier etc.).

**Freud**

- the data were gathered through the father so may have been interpreted already by the time it reached Freud, may have been biased because the father was a believer in Freud's work etc. Interpretation of the findings is subjective, and different researchers may have come to different conclusions about little Hans's behaviour and symptoms.
- little Hans was asked leading questions, so his responses may have been biased by the expectations of the father.
- there were other, perhaps more plausible explanations for little Hans's phobia, such as seeing a horse fall in the street.

**Veale and Riley**

- although most of the data were quantitative, some were qualitative data and these revealed individual differences (e.g. in choice of reflective surfaces) which quantitative data tends to obscure.
- quantitative data cannot provide such a good insight into individual false beliefs (which could then be tackled in therapy) as qualitative data.
- data were not collected on some aspects of short session behaviour (e.g. feelings following resisting) so these could not be compared to long sessions.

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17 Use one of the studies listed below to discuss the use of laboratory experiments in psychology.

Held and Hein (kitten carousel)  
Tajfel (intergroup categorisation)  
Langlois et al. (infant facial preference)

[10]

No marks for description of study.

Max 5 if only about strengths of lab experiments or only about weaknesses of lab experiments.

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 laboratory experiments in general.	1–3
<b>Either</b> points are limited to illustrating strengths or weaknesses of laboratory experiments without reference to the study <u>or</u> lack of depth and/or breadth. The answer shows some understanding.	4–5
<b>Strengths and weaknesses</b> of laboratory experiments 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 laboratory experiments and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8–10

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Examples of possible discussion points:

### Held and Hein

- *strengths*: lab experiments have rigorous controls e.g. no visual interference because kept in dark.
- lab experiments enable direct comparison of variables e.g. yolkling of active and passive kittens to ensure equivalent experience etc.
- *weaknesses*: because the laboratory experiment requires considerable controls of the (animal) participant's situation, there are ethical implications. The kittens were restrained and light deprived which cause (short-term) damage to their visual system and was probably distressing
- although the purpose of a laboratory experiment is to isolate variables by eliminating possible influences, this is an artificial situation. In real life kittens (or any neonate) would not be so restricted, so other factors than those studied might contribute to their visual development.

### Tajfel

- *strengths*: lab experiments allow for rigorous controls e.g. measurement of discrimination using the matrices, making it objective.
- lab experiments enable direct comparison of variables e.g. between options for gain to in-group or out-group.
- *weaknesses*: lab experiments may not represent real world situations e.g. guessing dots, judging paintings and giving other people points are not things that 15 year old boys usually do.
- lab experiments often contain cues that act as demand characteristics so the participants respond in ways they expect the experimenter to want. This is unlikely to have happened with respect to they were told the experiment was about vision.

### Langlois et al.

- *strengths*: lab experiments allow for rigorous controls e.g. standardised procedures of timing and position of faces.
- many controls in design, e.g. parent's view of faces was prevented to ensure that their preference was not communicated to the infant.
- *weaknesses*: lab experiments may not represent real world situations e.g. infants usually have a range of stimuli competing for their attention and the faces might just have been slightly less boring than one another, which isn't the same as being attractive.
- laboratory experiments rely on contrived situations but these are necessarily unfamiliar to the participants so can affect behaviour. The infants might have responded unusually because they were distressed – as evidenced by the numbers eliminated for 'fussing' (which also has ethical implications).