

## **MARK SCHEME for the May/June 2013 series**

### **9698 PSYCHOLOGY**

**9698/11**

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.

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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1 The experiment by Mann et al. (lying) investigated whether the suspects were lying or telling the truth.

(a) Explain why this is an experiment. [2]

- has IV and DV (only if not next 2 points)
- IV (of lying or telling the truth) is manipulated
- DV (of gaze aversion, blinking etc.) is measured
- comparison between groups (lying or telling the truth) / looking for differences (between lying or telling the truth)
- investigates causal relationships (lying affects behaviour)
- controls employed (coders unaware of reason for coding)

1 mark partial, 2 marks full (any two points, well explained or several weakly). Points do not have to be contextualised for full marks but is likely to provide detail.

(b) Outline one advantage of laboratory experiments using Mann et al. as an example. [2]

Most likely:

controls employed: coders unaware of reason for coding

can manipulate IV: e.g. correctly select truth / lie segments of video

1 mark partial (advantage identified, however fully), 2 marks full (contextualised however briefly).

2 Loftus and Pickrell studied false memories.

(a) Describe the aim of the study. [2]

To find out whether it is possible to implant (an entire) false memory for something that never happened.

1 mark partial, 2 marks full (expansion: e.g. any two of the underlined points)

(b) Describe one piece of evidence which supports the aim. [2]

29% (7/24 participants) 'remembered' the false shopping mall memory (or 6/24, 25% after first interview).

1 mark partial, 2 marks full (expansion likely to be data)

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

(a) Describe how the Asperger syndrome/high-functioning autism (AS/HFA) participants were selected. [2]

Volunteer / self-selected sampling,  
through adverts in UK national Autistic Society magazine (or equivalent support groups).

1 mark partial (**either** type of sampling **or** source), 2 marks full (e.g. **either** type of sampling and source, **or** sampling in detail **or** source in detail).

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**(b) Describe how the normal adult (control) participants were selected.** [2]

Opportunity sampling,  
from adult community/education classes (in Exeter)  
from public library users (in Cambridge)

1 mark partial (**either** type of sampling **or** source {e.g. source = environment or location}),  
2 marks full (**either** type of sampling and source, **or** sampling in detail, **or** source in detail).

**4 From the study by Held and Hein (kitten carousel):**

**(a) Describe the visual cliff results for the active and passive kittens.** [2]

no active kitten crossed to the deep side  
all passive kittens crossed to the deep side sometimes

1 mark partial, 2 marks full (data referred to for both groups)

**(b) What did Held and Hein conclude from these results?** [2]

that self-produced movement;  
with concurrent visual feedback;  
is necessary for the development of visually guided movement.

1 mark partial, 2 marks full (reference to both self-produced movement and visual feedback)

**5 Participants in the study by Haney, Banks and Zimbardo (prison simulation) went through an induction procedure. Describe two features of the induction procedure that were true to real life.** [4]

Most likely:

arrested at home: by 'real' police / with formal, serious attitude / avoided answering questions

charged: with suspicion of burglary/armed robbery / read rights / fingerprinted

handcuffed and searched

driven off in police car

on arrival stripped, given uniform and number, mugshots

NB: delousing may be true to real life in some countries.

NB: The induction procedure applies only to prisoners (guards = 'role instruction')

1 mark partial, 2 marks full (e.g. complete points as above) × 2

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**6 The study by Piliavin et al. (subway Samaritans) used several controls. Outline two of these controls. [4]**

Most likely:

- same subway train, same line with no stops for 7½ minutes
- same victim appearance: Eisenhower jackets, old slacks and no tie; black cane or liquor bottle in paper bag and smelled of alcohol
- same procedure: after 70 seconds/after passing first station victim staggers forward and falls on floor
- same recording of data: observers in same place on train recording frequency of helping, etc.
- 6–8 trials run on any given day
- The controls outlined need to show an awareness of the need to keep variables constant.

1 mark partial (e.g. “the subway”, “the victim”), 2 marks expansion × 2

**NB no marks for describing the IV**

**7 From the study by Tajfel on intergroup categorisation:**

**(a) Explain how the participants were allocated to groups in the first study and how they believed they were allocated to groups. [2]**

actually allocated randomly

believed they were allocated on basis of over/under-estimation or accurate/inaccurate estimation of dots / visual judgements.

1 mark partial (either actual or belief), 2 marks full.

**(b) Why was it essential to the experiment that participants were deceived in this way? [2]**

could be certain that discrimination was due to intergroup categorisation/identification with the (believed) in-group.

not prior relationships/other factors

1 mark partial, 2 marks full.

**8 From the study by Bandura et al. (aggression):**

**(a) How is ‘imitative learning’ different from the effect of the presence of a model on immediate behaviour? [2]**

imitative learning involves reproducing the learned behaviour in a new setting / in the absence of the model

whereas in social facilitation the model is present (during the performance of the behaviour)

1 mark partial, 2 marks full (must compare).

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**(b) How did Bandura et al. show that imitative learning involves the generalisation of responses when the model is absent?** [2]

moved children to new setting / setting without the model  
during data collection  
 by showing that children were aggressive without the model

1 mark partial, 2 marks full (must include the idea of 'when recording data').

**9 From the study by Schachter and Singer (emotion), identify four of the categories used by observers to code the behaviour of the participants in the anger condition.** [4]

- 1 agrees / says he is cross too (e.g. copies the stooge)
- 2 disagrees / e.g. 'take it easy, they probably have a good reason for wanting the information'
- 3 neutral / noncommittal or irrelevant remark
- 4 initiates agreement or disagreement / comment without instigation by stooge
- 5 watches/no comment, but looks at the stooge
- 6 ignores/no comment, but doesn't look at the stooge

1 mark per category × 4  
 categories can be identified by name/very simple description/example

NB see pages 386–7 of Schacter and Singer for clarification

**10 From the study by Dement and Kleitman (sleep and dreaming):**

**(a) Describe two features of the sample.** [2]

Most likely:

- 9 adults
- 7 males, 2 females
- volunteers

1 mark partial (e.g. '9 participants who were males and females'), 2 marks full.

**NB Controls are not features of the participants, '5 closely 4 to confirm' is procedure.**

**(b) Explain one disadvantage of this sample.** [2]

Most likely:

- small sample – (may have been unusual) so may not be able to generalise (from it) = 2
- gender inequity – more men, may not be representative of women's dreaming (as men and women may experience different dream content).

1 mark partial, 2 marks full.

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11 In the study by Maguire et al. (taxi drivers), ethical guidelines were followed. Identify two ethical guidelines and describe how they were followed in the study. [4]

- *informed consent*: gained in writing
- *confidentiality*: names of taxi drivers and control participants not known / control participants from anonymous database of scans
- *conduct / competence / avoiding harm*:
  - approved by ethical committee: by local hospital
  - certificated by the Administration of Radioactive Substances Advisory Committee
- *deception*
- *debriefing*
- *right to withdraw*

1 mark partial (state guideline), 2 marks full (expansion) × 2.

**NB participants provided lots of information so cannot be said to have been deceived. Debrief not mentioned.**

12 In the study by Demattè et al., four odours (smells) were used.

(a) Describe how the odours were delivered to the participants. [2]

delivered using an olfactometer  
a machine (regulating flow)

1 mark partial (using olfactometer / machine to regulate flow), 2 marks full (name and description)

NB the machine olfactometer emitted tones to signal to the participant.

(b) Explain one advantage of delivering the odours in this way. [2]

olfactometer regulates flow precisely / administers clean (medical) air in between tests (i.e. highly controlled)  
so differences in responses unlikely to be affected by differences in stimuli or residual/order effects (i.e. highly valid also reliable)

1 mark partial (simple e.g. 'controlled'), 2 marks full (expansion)

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**13 The study by Thigpen and Cleckley (multiple personality disorder) used the Rorschach (ink blot) projective test.**

**(a) Describe the results of this test for Eve White and Eve Black. [2]**

Most likely:

The Rorschach record of Miss **Black** is by far **healthier than** that of Mrs **White**.

Miss **Black** has a **hysterical** tendency, while Mrs **White's** shows **anxiety / obsessive-compulsive traits / rigidity / inability to deal with her hostility**.

Personality dynamics: **repression** in Mrs **White** and **regression** in Miss **Black**.

The dual personality appears to be the result of a strong desire to regress to an early period of life, namely the one before marriage (partial as no comparison)

1 mark Eve White OR Eve Black, 2 marks for comparison (as in bold above).

**(b) Explain one weakness of this projective test. [2]**

Most likely:

subjective interpretation on part of tester; based on Freudian interpretations of personality (which may be wrong); no hard or objective evidence.

1 mark partial (simple e.g. 'subjective'), 2 marks full (expansion)

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**14 One self report measure used by Billington et al. was the revised systemising questionnaire (SQ-R) which is an improved version of the original systemising questionnaire (SQ).**

**(a) Describe the original systemising questionnaire (SQ). [2]**

“The SQ, originally a 40-item, forced choice format, self-report questionnaire assesses an individual's drive to systemise across a range of domains. The SQ asks questions such as “I like music shops because they are clearly organised” and “When I learn a language I become intrigued by the grammatical rules”. It was recently revised as a 75-item questionnaire (SQ-R), with improved psychometric properties and sex-neutral items.”

- 40 or 60 items
- forced choice questions (4 choices, no middle one)
- assesses drive to systemise
- asks questions such as “I like music shops because they are clearly organised”

1 mark per descriptive item × 2

**(b) Explain how the revised systemising questionnaire (SQ-R) improved upon the original systemising questionnaire (SQ). [2]**

- 75/more items: so more reliable (=2)
- better psychometric properties: more valid and reliable (=2)
- includes sex-neutral items: so less biased (=2)

1 mark partial, 2 marks full (expansion: two reasons or one reason explained)

NB SQ-R was also forced choice.



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15 The study by Veale and Riley (mirror gazing) used the self report method.

- (a) Outline two pieces of qualitative data about behaviours from the body dysmorphic disorder (BDD) patients. [2]

'BDD patients listed a range of other behaviours that they engaged in whilst in front of the mirror. These included "washing rituals"; "combing my eyebrows"; "studying my eyes, hair and skin to observe the effect of stress on the ageing process"; "pulling my features or squashing my nose to see how I'd look if I had plastic surgery"; "pull ugly faces to prove how disgusting I am" or "I try to permanently fix my image mentally"

Any of above = 1 mark × 2

NB this list is the *only* qualitative data

- (b) Suggest one advantage of collecting qualitative data in this study. [2]

Most likely:

- detail: so able to understand reasons for mirror gazing
- allows participants to express themselves exactly: where as forced choice questions may not provide exactly the right option

1 mark partial, 2 marks full (expansion = explanation)

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16 Discuss one of the studies listed below in terms of the extent to which it supports a situational explanation.

**Milgram (obedience)**

**Haney, Banks and Zimbardo (prison simulation)**

**Rosenhan (sane in insane places)**

[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
<b>Either</b> points illustrating the extent to which a situational explanation is supported lack depth and/or breadth <b>or</b> only supporting points or conflicting points are considered. The answer is general rather than focused on study but shows some understanding.	4–5
Both supporting points and conflicting points 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 points supporting and conflicting with a situational explanation are considered and are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

**Milgram**

- support: obedience affected by aspects of setting: authority figure, lab coat, prestigious university, prods
- conflict: individual differences (e.g. different stopping points, signs of tension)

**Haney, Banks and Zimbardo**

- support: guards and prisoners took on roles even though no instructions/height/personality differences
- conflict: some prisoners suffered more, some guards questioned behaviour

**Rosenhan**

- support: nurses and psychiatrists interpreted behaviour in context of hospital, difficult to shift label
- conflict: some pseudopatients released earlier than others, all eventually released and reported as in remission (though equally could be used as support!)

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17 Discuss the use of children in psychological research using one of the studies listed below as an example.

**Freud (little Hans)**

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

**Nelson (children’s morals)**

[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
<b>Either</b> points illustrating advantages and disadvantages of using children lack depth and/or breadth <b>or</b> only strengths or weaknesses are considered. The answer is general rather than focused on study but shows some understanding.	4–5
Both advantages and disadvantages of using children 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 advantages and using children and both are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

Acceptable for all studies:

- to investigate ongoing development / nature-nurture
- comments relating to ethics of working with children

**Freud**

- advantages: able to follow progress before and after Oedipal conflict (unlike in adults in therapy) to investigate role of father etc., able to offer potential to resolve issues
- disadvantages: Hans may have been less insightful/able to offer less information/have poorer understanding of questions than adults in therapy

**Langlois**

- advantages: can readily manipulate infants to introduce controls, e.g. held 35cm from screen, light/noise to attract attention
- disadvantages: infants require techniques such as visual preference tasks to measure responses – these may be interpreted incorrectly e.g. infant may be upset/hungry so look away

**Nelson**

- advantages: although children may have poor understanding of language rather than moral concepts, Nelson overcame this using pictures
- disadvantages: moral dilemmas are potentially unpleasant but ethical issues prevent the use of genuinely distressing dilemmas with children so the action used (ball on head) may not be valid