

## **MARK SCHEME for the October/November 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.

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### Section A

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

**(a) Explain what he aimed to find out about obedience. [2]**

To test the 'Germans are different' hypothesis (possible expansion: Hitler could not have put plans into action without obedience of thousands and that Germans have a personality defect – readiness to obey authority without question).

That situational factors affect obedience = 1 mark (possible expansion – example of factors)

NB Candidates can access full marks via either of these approaches, or a combination.

To see if people would obey even when they disagreed/objected/didn't want to = 1 mark

1 mark partial, 2 marks full (some expansion).

**(b) Outline how one finding supports or contradicts this aim. [2]**

Most likely  
26/40 went to 450 volts and 'killed' another person  
so Germans are not different; that people do obey authority without question – including those in the United States.

1 mark partial (finding/conclusion stated but not explained)

2 marks full (finding/conclusion explained).

**2 The Haney, Banks and Zimbardo prison simulation study recruited participants through a newspaper advertisement.**

**(a) Suggest one advantage of recruiting participants through newspaper advertisements. [2]**

Most likely:

- target population wider and larger (than say student sample)
- potentially wide range of respondents: (age, occupation, etc.)
- the wording of advert can attract particular features or characteristics (e.g. people who are willing to commit to a certain type of study)
- ethically sound because volunteer, so are choosing to participate

1 mark partial, 2 marks full.

they have volunteered/have chosen to participate = 1 mark

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- (b) Suggest one disadvantage of recruiting participants through newspaper advertisements. [2]

Most likely:

may not be representative of wider population because:

- targets only those reading that particular newspaper
- those replying, volunteers, may possess particular characteristics
- the sample will not include those who will not reply to a newspaper advertisement
- not ethically sound because responding to ad may make participants feel obliged to continue, i.e. feel they cannot exercise their right to withdraw

1 mark partial, 2 marks full.

- 3 The study by Piliavin et al (subway Samaritans) aimed to test the ‘diffusion of responsibility’ hypothesis.

- (a) Explain whether the findings support the ‘diffusion of responsibility’ hypothesis. [2]

Most likely: finding did not support the hypothesis, as there was no diffusion of responsibility.

1 mark partial (hypothesis not supported), 2 marks full (expansion saying why – may include data but no mark for data alone).

- (b) Suggest one explanation for the findings of the study. [2]

Most likely:

- no diffusion of responsibility, as participants were face-to-face with victim.
- participants made cost/benefit decision. (= full for cost/benefit decision explained)

1 mark partial, 2 marks full.

NB may refer to other aspects of the findings in part (b), and if clear and elaborated, must still be able to earn full marks

- 4 From the study by Tajfel on intergroup categorisation:

- (a) Describe the matrices used to collect quantitative data. [2]

Most likely:

14 columns, 2 rows

numbers in (top) row = rewards/ingroup etc.

numbers in (bottom) row = penalties/outgroup etc.

participants choose a pair of numbers (i.e. a column)

matrices maximised different relationships (MIP/MJP/MD)

in booklets

1 mark partial, 2 marks full (understandable – does not need to be ‘complete’)

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**(b) Outline one advantage of collecting quantitative data in this study. [2]**

Most likely:

numerical data (choice of number pair) is:

- easy to analyse because doesn't need to be interpreted/can use statistics
- objective as it doesn't need to be interpreted (grids indicate MIP/MJP/MD)
- easy to find differences between conditions as direct comparison can be made (between ingroup/outgroup)

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

**5 The study by Bandura et al on aggression involved observation.**

**Outline two strengths of the way in which the observation was conducted. [4]**

Most likely:

- observation conducted for 20 minutes divided into 5 second intervals via a timer; so had 240 responses for each child/so lots of repetitions make it reliable
- one-way glass/so child couldn't see observer; so less likely to show demand characteristics;
- involved two observers; so results could be checked for inter-rater reliability;
- children in one room and observers in another, so children not influenced.

1 mark partial, 2 marks full ×2.

N.B. simply having two observers does not, of itself, increase reliability (but having 2 observers is an advantage, so 1 mark for this)

N.B. Must be an advantage of observation. Do not credit general advantages of the research method/design, such as that the children were matched

**6 From the study by Freud (little Hans):**

**(a) Outline the self report method as used in this study. [2]**

Most likely:

- answered questions
  - e.g. open questions such as [from the giraffe dream] 'Why did the big one call out?'
  - e.g. closed questions such as [from the giraffe dream] 'Were you afraid?'
  - e.g. leading questions such as [in relation to his fear of horses] 'When the horse fell down, did you think of your daddy?'
- asked by his father/originally from Freud by letter
- passed back to Freud for interpretation of Hans's dreams/fantasies

1 mark partial

2 marks full (must be contextualised e.g. with example of question, or comment about Freud/Hans's father).

'answered questions asked by his father' = 2 marks.

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**(b) Describe one advantage of the self report method.** [2]

Most likely:

- data directly from participant: so high in (ecological) validity
- data in depth/detailed: so (potentially) high in validity
- can offer insight into behaviour: such as reasons why

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

**7 Describe two findings from Langlois et al (infant facial preference).** [4]

Study 1:

- infants looked for longer at attractive faces (than unattractive ones)
- boys looked for longer at male faces (than female ones) (girls' same-sex looking greater than opposite-sex looking but not significantly so)
- preference not affected by sex of infant, attractiveness of face or maternal attractiveness

Study 2:

- infants looked for longer at attractive black women's faces (than unattractive)
- infants looked for longer in the first two trials (than in subsequent ones)
- preference not affected by sex of infant, attractiveness of face or maternal attractiveness

Study 3:

- infants looked for longer at attractive babies' faces (than unattractive ones)
- infants looked for longer in the first two trials (than in subsequent ones)
- preference not affected by sex of infant

looked for longer at attractive faces = 1 mark

looked for longer at attractive faces than unattractive faces = 2 marks

findings include conclusions (although cannot score 3 for one finding)

conclusions could include explanations (e.g. 'nature because detect averageness')

2 marks × 2

**8 From the study by Nelson on children's morals:**

**(a) Explain why Nelson was interested in children's understanding of both motives and outcomes.** [2]

Most likely:

"Piaget ... After the age of 10 years, judgments ... consistently based on motive... young children's tendency to base ... judgments more on consequence information need not imply that they are unaware of intentions... . In fact...the concepts of intention and motive emerge at about the same time as the first "whys," that is, around the age of 3–4 years"

- because Piaget found these factors affected children's moral judgments at different ages; consequences in younger children, motives after 9–10 years
- but Piaget also said using consequence information doesn't necessarily imply no awareness of intention
- to see whether 3–4 year olds could use motives too

1 mark partial (e.g. 'Because because both factors matter')

2 marks full (e.g. 'Because because the two factors affect children's judgments at different ages').

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**(b) How did Nelson follow the ethical guideline of obtaining consent? [2]**

Consent obtained from parents, as children too young to give consent.  
1 mark partial, 2 marks full.

**9 From the study by Schachter and Singer (emotion), identify four objects used by the stooge in the euphoria condition. [4]**

rubber band/slingshot, paper (accept paper plane and crumpled paper used as a ball as two), pencils, waste bin, (manilla) folders, (hula) hoop

1 mark per item, any 4 = 4 marks.

**10 The study by Dement and Kleitman looked at different aspects of sleep and dreaming.**

**(a) Describe one of the aims of the study. [2]**

Any one from:

- to see if REM sleep is associated with dreaming;
- to see if dream length could be accurately estimated; (and narration);
- to see if eye movement matches dream content.

1 mark partial, 2 marks full.

e.g. to see if eye movement was related to dreams = 1 mark

**(b) What were the results in relation to this aim? [2]**

All results supported the aim. 1 mark for stating this, 2 marks for expansion (more than just repetition of aim). Actual data not needed for 2 marks, but data counts as expansion.

1 mark partial, 2 marks full.

N.B. although not a stated aim, D&K did test dream recall following different length delays, and this can earn marks in **(b)** if given as an aim in **(a)** – where it will have scored 0.

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**11 The study by Maguire et al (taxi drivers) investigated navigational ability.**

- (a) Explain what is meant by a ‘repeated measures design’ using Maguire et al as an example. [2]**

All participants do all conditions

The taxi drivers were tested on all conditions, e.g.

- topographical
- nontopographical
- sequential
- nonsequential
- baseline

1 mark partial (definition or stand-alone example), 2 marks full (definition and example – any pair of comparisons sufficient).

N.B. any ‘all participants do the same conditions’ type answers get 1. They need to make it clear that they all do all levels of the IV for 2 e.g. by giving an example.

N.B. ‘All participants do the same things/tests’ = standardisation of procedure so = 0 marks.

- (b) Outline one advantage of using a repeated measures design. [2]**

Most likely:

- avoids effects of participant variables/individual differences; so reduces risk of differences caused other than by the IV

1 mark partial, 2 marks full.

N.B. Very general ‘controls things’ answers are likely to get 0

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12 Many controls were used in the procedure of the study by Demattè et al (smells and facial attractiveness).

(a) Identify two of the controls used. [2]

There are many, e.g.:

- all participants sitting/on a chair
- 70 cm from computer
- fixation cross
- told to exhale through nose at quiet tone
- quiet tone same volume at ear for all participants
- 22 Hz, 200 ms duration
- told to inhale through nose at loud sound
- faces shown for 500 ms/in centre of screen
- screen turned black
- 10 000 ms interstimulus interval
- clean medical air during interstimulus interval
- 5 min rest every 40 trials

1 mark for each control ×2.

Also accept controls imposed before study, e.g. about normal sense of smell, no olfactory dysfunction, no colds, etc.

(b) Explain why controls are necessary in experimental studies. [2]

most likely:

increase reliability; ensure all participants treated the same

increase validity; ensure differences between conditions/in DV due only to IV

1 mark partial, 2 marks full.

N.B. Here, very general 'controls things so all the same' type answers may score 1.

N.B. Beware of answers describing control *groups* = 0 marks.

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**13 In the study by Rosenhan (sane in insane places) the pseudo-patients asked the nurses for information.**

**(a) How did the nurses respond to these questions? [2]**

N.B. question asks about nurses and not psychiatrists.

Most likely:

- stops and talks 0.5%
- pauses and chats 1.5%
- makes eye contact 10%
- continues, looking the other way 88%

1 mark partial e.g. “nurses ignored them”,

2 marks for expansion e.g. more than one of above or with numbers.

1 mark partial, 2 marks full.

**(b) Suggest one reason why the nurses responded to these questions in the way that they did. [2]**

Most likely:

- it involves a situational explanation. Inmates are mentally ill and so cannot communicate/are non-people, etc.

Any other appropriate answer to receive credit, including elaboration mark.

1 mark partial (lacking sufficient detail or explanation), 2 marks elaboration (sufficient detail/explanation to demonstrate clear understanding)

**14 Billington et al (empathising and systemising) is an experiment. With reference to this study, describe two characteristics of experiments. [4]**

Most likely:

- has IV and DV (IV = gender/subject choice/empathising and systematising, FC–EFT score DV = subject choice/empathising and systematising/eyes test score, FC–EFT score)
- IV manipulated (divided participants up by cognitive style/SQ and EQ scores)
- DV measured (gender males and females/choice of physical science and humanities students)
- comparison between groups/to look for differences/to investigate causal relationships (compared males and females/compared physical science and humanities students/compared cognitive styles/to see if cognitive style or gender predicted subject choice better)
- controls employed/ensure differences between conditions are due to the IV not extraneous variables (same tests on all participants, test order not fixed so reduces order effects)

1 mark partial (statement of any characteristic of experiments e.g. from above, however brief)

2 marks full (application to Billington et al, however brief = examples are in brackets).

×2

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

(a) Identify and outline one self report tool used with the body dysmorphic disorder (BDD) patients. [2]

mirror gazing questionnaire: asked about feelings/behaviours in front of mirror; length of sessions, motivation (Likert scale), focus of attention (visual analogue scale, +4 to -4, in response to statements), distress before and after looking in mirror (visual analogue scale, 0 to 10, for different types of gazing session), list of other behaviours (type of light preferred, types of surfaces, mirror avoidance)

1 mark partial, 2 marks full.

Full marks can be accessed for detail on one aspect (e.g. 'focus of attention' if detailed)

(b) Describe one piece of quantitative data from this study. [2]

yes to long sessions: BDD: 44/52 (84.6%), controls 16/54 (29.6%)  
 yes to short sessions: BDD: 45/52 (86.4%), controls 43/54 (79.6%)  
 etc.

1 mark partial (either numerical data or description)

2 marks full (both data and description, e.g. 84.6% of BDD participants said 'yes' to long sessions, which was more than the controls 29.6%).

N.B. question asks for data, so must be results.

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### Section B

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

**Held and Hein (kitten carousel)**

**Dement and Kleitman (sleep and dreaming)**

**Thigpen and Cleckley (multiple personality disorder)**

[10]

No marks for description of study.

Max 5 if only about strengths in terms of ecological validity or only about weaknesses in terms of ecological validity.

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 ecological validity of study lack depth and/or breadth <b>or</b> only strengths or weaknesses in relation to ecological validity are considered. The answer is general rather than focused on study but shows some understanding.	4–5
<b>Both</b> strengths and weaknesses of study in terms of ecological validity 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
Some strengths and weaknesses of study in terms of ecological validity, which are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

#### Held and Hein

- good because visual cliff is good simulation of depth in real world
- poor because some animals could feel/possibly see reflections of safety glass

#### Dement and Kleitman

- good because we are woken up by bells (e.g. alarm clocks/fire bells)
- poor because sleeping in lab unlike comfort/privacy of own home

#### Thigpen and Cleckley

- good because reports from real life of participant
- poor because aware of being focus of study so may lead to social desirability/demand characteristics

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17 Discuss the strengths and weaknesses of the cognitive approach using one of the studies listed below as an example.

**Mann et al (lying)**

**Loftus and Pickrell (false memories)**

**Baron-Cohen et al (eyes test)**

[10]

No marks for description of study.

Max 5 if only about strengths of the cognitive approach or only about weaknesses of the cognitive approach.

0 marks if only about the study, not the cognitive approach.

3 marks max if points only tenuously about the cognitive approach in general, rather than the 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 strengths and weakness of the cognitive approach 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
<b>Both</b> strengths and weaknesses of the cognitive approach are considered and argument is focused on the study although aspects of the evaluation may lack quality and/or depth. The answer shows reasonable understanding.	6–7
Strengths and weaknesses of the cognitive approach include effective focus on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

#### **Mann et al**

- cognitive approach has applications, e.g. in this case to police interpretation of interviews
- cognitive approach limited to what can be observed to *indicate* events in information processing e.g. hard to be certain what guilty individuals who blink less are thinking.

#### **Loftus and Pickrell**

- lab experiments typical of cognitive approach allow for controls such as ensuring participants *hadn't* been lost in a mall.
- cognitive interpretations may have alternative explanations, Loftus and Pickrell note that they make “no claims about the percentage of people who might be able to be misled in this way...”

#### **Baron-Cohen et al**

- some cognitive functions can be readily assessed using visual/verbal tests such as the eyes test, providing extensive, valid, reliable data
- Baron-Cohen et al note that it is “A challenge for psychology to develop tests that are sensitive to subtle cognitive dysfunction.” and that without such tests “... the investigator might erroneously conclude that the patient is ‘recovered’ or ‘normal’ ”