Cambridge International AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

PSYCHOLOGY **9698/12**

Paper 1 Core Studies 1 **October/November 2016**

MARK SCHEME

Maximum Mark: 80

Published

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Section A

1 In the study by Mann et al. (lying), the video clips were sorted into truths and lies.

(a) Explain how Mann et al. knew they were truths or lies. [2]

(reliable, independent) witness statements
or corroborated/forensic evidence
showed that the suspect's statement was true / a lie

e.g. witness changed his mind because forensic evidence showed he was lying (2 marks)

1 mark partial
2 marks full

(b) Identify <u>two</u> examples from the video clips that were either truths or lies. [2]

Lie: longer pauses / less blinking / denying rape / denying murder / denying arson
Truth: personal details / e.g. name /

1 mark – one example
2 marks – two examples

Note: Must indicate whether truth or lie for mark

(Lie) denied being in house all day, (Truth) detail of how murder happened (2 marks)

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

(a) Describe the results of the visual cliff test. [2]

Most likely
1 mark partial (brief description)
The active kittens were more likely to cross to the shallow than the deep side / were less likely than the passive kittens to cross to the deep side.

2 marks full (detailed description)
(All 10 or 12) Active kittens made 12 crossings to the shallow side and none to the deep side.

Also
The results of group Y were similar to group X, with all active kittens making 12 crossings to the shallow side and passive kittens making some errors (6/6 and 8/4 shallow/deep)

After 48 hours in the light all passive members of group X performed all crossings to the shallow side.

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(b) Explain whether the visual cliff test was valid. [2]

yes:
Because it mimics a real situation that kittens encounter (like stairs);
Because they could not see the glass;
Because they could not see feel the glass;

no:
Because the square edges/patterned fabric was unlike drops in real life;
Because the kittens were put on a bridge rather than getting themselves there;

1 mark partial (brief explanation/non-contextualised answer, i.e. definition of validity)
2 marks full (detailed explanation)

Note: 2 marks may be gained with two ideas or one in detail. Two ideas may argue in different directions.

Note: Stating conclusions / supported the aim / showed what the experimenters were looking for = 0
Note: No marks for reliability unless it is clear that this contributes to validity.
Note: Stating 'There were controls' is not enough, these must be explicit.

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

(a) Describe <u>one</u> sampling method used in the study. [2]

<u>Volunteer / self-selected</u> sample (of group 1 (AS/HFA)); <u>participation requested</u> by newspaper advertisement / through support groups;

<u>Opportunity sample</u> (of Groups 2 and 3); potential participants selected who were <u>readily available</u> (from adult community education groups / library users / undergraduates);

<u>Random sample</u> (Group 4 (general population)); participants obtained by process such as <u>random number generator/table</u>; and choosing those individuals <u>from a list</u> (e.g. electoral register); according to the random numbers; so that each individual on the list has an <u>equal chance of being selected</u>.

1 mark partial = naming the sampling method
2 marks full = naming and describing the sampling method

Note: the question asks for a description of the sampling method itself (underlined above), i.e. not the sample nor how it was done in this study. No credit for naming group.
Note: volunteer and opportunity are from the study, random is possible, though not stated. Credit any of these.

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(b) Explain <u>one</u> advantage of this sampling method. [2]

Volunteer/self-selected sample
Can easily obtain sample with particular characteristics; e.g. in this case AS participants
Easier than opportunity sampling as participants come to you; e.g. in this case replied to adverts;

Opportunity sample
Can easily obtain participants as they are chosen on basis of availability so are close at hand; e.g. in this case local adults or students;

Random sample
Representative of the wider population; as there is an equal chance of anyone in the target population being selected;

1 mark partial = simple statement of advantage
2 marks full = detailed statement of advantage. Elaboration is likely to be example in context of this study (but does not have to be contextualised)

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

(a) Describe what is meant by the 'self report' method. [2]

participant provides data to the researcher
e.g. in response to questions / questionnaire / interview
rather than the researcher making direct observations (of behaviour)

1 mark partial (incomplete / lacking sufficient detail or explanation to demonstrate clear understanding)
2 marks full (detail of method does not have to be contextualised)

(b) Explain why it was important to collect self report data in this study. [2]

to provide information:
about mood (of the prisoners / guards)
about personality (authoritarian personality/Machiavellianism/pathology
in order to:
to measure individual differences before the study started;
to track interpersonal dynamics in prisoners and guards;
to assess emotional changes;
to measure variables which could not be assessed by observations/recordings alone

1 mark partial (probably what might need to be assessed)
2 marks full (why it was important to measure this, i.e. to ensure there were no baseline differences, to track changes or because observations alone could not indicate feelings)

Note: Can get full marks for 'why it was important' alone.

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

(a) Describe <u>one</u> control used in the study. [2]

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 behaviour by stooge; after 70 seconds victim staggers forward and falls on floor;
same observers recording of data: observers in same place on train recording frequency of helping, etc.

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

(b) Explain the importance of this control in the study. [2]

Most likely:
same subway train: all participants had same time/opportunity to help;
same victim appearance: whether ‘drunk’ or ‘cane’ was the only thing that differed; so helping or not wasn’t due to what they were wearing;
same behaviour by stooge: victim had to do the same thing as a drunk or ill person, otherwise helping differences could have been due to behaviours;
same observers recording data: observers needed to have the same view/personal opinion so that they were consistent/reliable;

1 mark partial (awareness of being constant is needed / relevant term: validity/reliability/standardisation, may not be contextualised)
2 marks full (clearly explained, must be contextualised)

6 From the study by Tajfel (intergroup categorisation):

(a) Describe what is meant by a ‘repeated measures design’. [2]

An experimental design in which any one participant/group performs in each of the conditions/levels of the independent variable (i.e. awarding points to both in- and out-group).

1 mark partial = a correct but unclear description
2 marks full = a correct and clear description (may be contextualised, but does not have to be)

Note: ‘All participants do all tasks/tests/parts of the experiment’ = 1 mark

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(b) Explain why Tajfel used a repeated measures design. [2]

Most likely
overcomes individual differences between participants, e.g. if they happened to be more/less generous; which would matter if all the mean ones were in one group (e.g. all did the 'allocation of points to the out-group' condition).

accept:
uses less participants (which is ethically/practically better). (max 1 mark)
because it is easier than matched pairs as pairs of participants *with the same generosity/tendency to be prejudiced* don't have to be found. (2 marks)

1 mark partial = a brief explanation
2 marks full = a correct and clear explanation which is contextualised, at least briefly

7 The study by Freud (little Hans) was a case study using reports from little Hans's father. Alternatively, Freud himself could have observed little Hans.

(a) Suggest <u>one</u> advantage of Freud himself observing little Hans. [2]

most likely
Freud might have been more objective than Hans's father; as his father might not have wanted to report bad things about his own son; making the findings more valid;
Freud would not have had the prior knowledge that Hans's father had; so would have been less biased; making the findings more valid;

1 mark partial (advantage identified), 2 marks full (elaborated advantage)

Note: no marks for use of term (e.g. validity) alone, but may elaborate a point.

(b) Suggest <u>one</u> disadvantage of Freud himself observing little Hans. [2]

most likely
Hans's behaviour might have been unrealistic; e.g. if he'd been taken out of the home by Freud / because Freud was unfamiliar; so low (ecological validity);
Hans was less likely to say things to Freud than to his father (as he knew his father better); so Freud would be less likely to get detailed information;
Freud knew little Hans less well than his father; so Freud was less likely to be able to notice changes in Hans's behaviour;

1 mark partial (disadvantage identified), 2 marks full (elaborated disadvantage)

Note: no marks for use of term (e.g. ecological validity) alone, but may elaborate a point.

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

(a) Describe <u>two</u> pieces of apparatus that were used. [2]

color slides of 16 adult women and 16 adult men; half of the slides of each sex depicted attractive faces, the other half unattractive faces, The slides of the women's faces had been used in a previous study of infant preferences for attractive faces...stimuli were selected so that facial expression, hair length, and hair color were equally distributed across attractiveness conditions within sets of slides. All of the male faces were clean-shaven. Clothing cues were masked and all of the faces were posed with neutral expressions…rear-projected onto a screen… parent wore occluded glasses to prevent him or her from viewing the faces so that parental preferences could not be communicated to the infant. A light and a buzzing noise… to capture the infant's attention.

1 piece of apparatus with any description = 1 mark x 2
Note: 2 pieces of apparatus named without description = 1 mark.

(b) Describe <u>one</u> finding. [2]

preference for attractive faces in all conditions (White adult male and female faces, Black adult female faces, and infant faces, i.e. race, gender, and age).

1 mark partial (finding stated)
2 marks full (finding elaborated, with words or data)

Infants preferred attractive faces (to unattractive ones) = 1 mark
Male infants preferred male faces (to female faces) = 1 mark

9 Describe <u>two</u> controls from the study by Schachter and Singer (emotion). [4]

All participants waited the same length of time between injection and observation; 20 minutes;
The experimenter said the same thing as they left the room in all conditions; 'Sorry I haven't had time to clear up…';
The initial actions of the stooge were scripted; e.g. they did the same introduction / icebreaker comments in all conditions;
Actions of the stooge were scripted; e.g. they always … basketball (euphoria) / breakfast comment (anger);
Information provided was scripted; e.g. EpiInf were always told … about shaking / heart pounding / the side effects would last 15-20 minutes;
Misinformation provided was scripted; e.g. EpiInf were always told … about numbness / itching / the side effects would last 15-20 minutes;
There were the same things in the room in all conditions; e.g. paper, pencils...;

1 mark partial (control identified), 2 marks full (some detail about control) x 2

All participants were told they would wait for 20 minutes (1 mark)

Note: Accept controls from any part of the procedure.
Note: Controls keep conditions the same in all respects other than the IV

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10 The study by Dement & Kleitman (sleep and dreaming) was <u>not</u> a case study.

(a) Describe what is meant by a 'case study'. [2]

only one individual (or one 'instance' e.g. family, company); studied in depth

1 mark partial (any one correct point)
2 marks full ('one individual' plus any other correct detail / example)

Note: Accept 'using a variety of methods to collect data' / 'to study complex relationships' as second points
Note: 'long time period' is incorrect

(b) Explain <u>one</u> advantage of investigating sleep and dreaming using a case study. [2]

as sleep is a biological process, it is similar in all people; so it is possible to generalise from one case (to an extent);
can gain detailed information on complex interactions such as dreams and past experience; allowing the two to be related;

1 mark partial (any relevant advantage)
2 marks full (advantage in detail)

11 From the study by Maguire et al. (taxi drivers):

(a) Describe the similarity between the routes task and the film plots task. [2]

most likely
Both sequential;
testing recall of information in a particular order;

1 mark partial (either 'sequential' or idea of recall of things in order)
2 marks full (clear explanation)

Note: 'sequential' is not the same as 'non-topographical' (the latter includes routes and landmarks)
Note: Candidates may interpret this in terms of what was done rather than what was measured. Nevertheless, correct answers will mention the sequential nature of the task, so can access the marks – e.g. testing order of places/events in a film.

(b) Describe <u>one</u> conclusion from the study. [2]

The hippocampus is involved in processing spatial layouts; learned over a long time;
Similar brain areas are involved in routes and landmarks memory; so topographical memory responds to any relevant topographical stimulation;
The right hippocampus is for navigation in large-scale environments; non-topographical memory uses the left inferior frontal gyrus;

1 mark partial (brief/muddled conclusion)
2 marks full (one clear conclusion)

Note: marks are for conclusions not results

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12 From the study by Demattè et al. (smells and facial attractiveness):

(a) Describe what Demattè et al. aimed to investigate. [2]

To find out whether olfactory cues affect visual judgements of attractiveness;
using psychophysical methods;
specifically whether hedonic value/pleasantness of a smell alters perceived attractiveness;
of males faces judged by females;

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

Note: The use of non-body relevant smells was part of the procedure (the control condition), it wasn't an 'aim', so is irrelevant.

(b) Explain whether the findings of the study supported their aims. [2]

Yes (the results did support the aim), because low hedonic value/unpleasantness of a smell reduced perceived attractiveness;

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

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

(a) Describe how qualitative data were collected. [2]

Pseudopatients watched and wrote notes on the behaviour of the staff (the participants);
so were participant observers;
for example they collected information about staff beliefs about their behaviours;

1 mark partial (e.g. brief description of what was collected)
2 marks full (some detail of process or of variable)

(b) Describe <u>one</u> qualitative finding. [2]

Staff interpreted the pseudopatients' behaviour as abnormal;
queuing early for food as oral-acquisitive behaviour (rather than boredom);
note-taking as engaging in writing behaviour (symptom of forgetting/compulsion of schizophrenia rather than recording events);
walking corridors as nervous behaviour (rather than boredom);

1 mark partial (e.g. brief description of result)
2 marks full (some detail of result)

Note: Accept ideas from both pseudopatients' observations and contents of nursing reports.

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14 Billington et al. (empathising and systemising) used the embedded figures test.

(a) Describe the variable this test measures. [2]

(the variable is) attention to detail and analytical skills
i.e. prerequisites of systemising

1 mark partial (any detail of systemising)
2 marks full (elaboration of what systemising is or term systemising plus detail)

(b) Explain <u>how</u> this test measures the variable you have described in (a). [2]

Figures had a pair of diagrams and a small shape (12 of them),
task to find shape (small, black and white) hidden in one of the big shapes
score of number correct (and speed)
within 50 seconds
so looking at ability to break down a pattern into its parts.

Note: accept diagrams, including any 'shape within a shape' drawn.

1 mark: any aspect of test drawn or described
2 marks: any aspect of test explained in relation to systemising.

15 The study by Veale and Riley used a questionnaire about mirror gazing.

(a) Describe the results for distress <u>before</u> a long session. [2]

BDD average ratings 6.44, controls 1.6

BDD were more distressed than controls = 1 mark

(b) Describe the results for distress <u>after</u> a long session. [2]

BDD average ratings 7.63, controls 2.4

BDD were more distressed than controls = 1 mark
BDD distress was higher after than before = 1 mark
Controls' distress was higher after than before = 1 mark

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Section B

16 Evaluate the use of quantitative data using <u>one</u> of the studies listed below.

Loftus and Pickrell (false memories)
Milgram (obedience)
Thigpen and Cleckley (multiple personality disorder) **[10]**

No marks for description of study.
Max 5 if only about strengths or only about weaknesses of quantitative data.

Comment	mark
No answer or incorrect answer.	0
Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.	1–3
Either points limited to illustrating strengths or weaknesses of gathering quantitative data **or** lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4–5
Both strengths and weaknesses of gathering quantitative data 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
There is a **balance** of detail between strengths and weaknesses of gathering quantitative data 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:

Loftus and Pickrell

- *strength* able to collect objective data; e.g. using quantitative measures such as the number of words in the recalled story;
- *strength* able to use statistical procedures, which is not possible on qualitative data; e.g. mean clarity rating, enabling comparison between true and false stories;.
- *weakness* although most of the data were quantitative, the interviews could have been subjective; so assumptions about the validity and reliability of the quantitative data may be misplaced;
- *weakness* quantitative data such as confidence rating may not be comparable between people; the only truly objective quantitative scales are ratio ones;

Milgram

- *strength* able to collect objective data; e.g. using quantitative measures such as highest voltage reached, which are reliable;
- *strength* able to use statistical procedures, which is not possible on qualitative data; leading to generalisations e.g. about typical patterns such as based on the percentage of people who reached 300 V (100%);
- *weakness* although most of the data were quantitative, some was qualitative data and these revealed individual differences; e.g. in the extent of distress shown, which shows that people did not all respond in the same way even if they went to the same voltage;
- *weakness* Most quantitative data cannot provide such a good insight into why people obeyed; to do this you need to ask them the reasons for their obedience/resistance;.

Thigpen and Cleckley

- *strength* able to systematically and consistently collect the same quantitative data from each personality; e.g. EEG/IQ test; i.e. likely to have high reliability where as qualitative data would be less consistent;
- *strength* able to use scientific tests and measures such as IQ and EEG, which have high validity; whereas qualitative data could be subjective i.e. affected by the interpretation of the researchers interviewing Eve;
- *weakness* some of the quantitative data did not reveal differences, even though the personalities were very different (e.g. the EEG of EW and Jane were the same); because quantitative data is very simplistic and can overlook subtle or complex differences;
- *weakness* quantitative data (only shows the personalities are different) but cannot provide such a good insight into the individual's problems; which is important to be able to help Eve in therapy;

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17 Discuss the strengths and weaknesses of using children in psychological research using <u>one</u> of the studies listed below.

Bandura et al. (aggression)
Tajfel (intergroup categorisation)
Nelson (children's morals) **[10]**

No marks for description of study.
Max 5 if only about the strengths or only about the weaknesses of using children.

Comment	mark
No answer or incorrect answer.	0
Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.	1–3
Either points limited to illustrating strengths or weaknesses of using children **or** lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4–5
Both strengths and weaknesses in terms of using children 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
There is a **range** of detail of strengths and weaknesses of using children (e.g. different methodological issues, ethics) and both are focused on the study. Discussion is balanced with good understanding and clear expression.	8–10

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Acceptable for all studies:
- To investigate ongoing development
- Comments relating to ethics of working with children

Bandura et al.
- *Strength* because children are (likely to be) naïve to the hypothesis/unlikely to respond to demand characteristics/social desirability bias; the findings will be more valid e.g. children were openly aggressive even though they knew there were adults nearby;
- *Strength* because can look at young children who have had less opportunity to become aggressive for other reasons (e.g. work/sport) so can study the effect of models on aggression; without having to consider whether the social situation is triggering aggression for other reasons;
- *Weakness (ethical)* children are more vulnerable than adults, so need to be especially careful; and this was a problem in Bandura's study because they were being exposed to badly behaved models;
- *Weakness* because children may still respond to demand characteristics; e.g. they may have thought that they were supposed to copy the models (rather than actually learning to behave aggressively through modelling);

Tajfel
- *Strength* because children are (likely to be) naïve to the hypothesis/unlikely to respond to demand characteristics/social desirability bias; the findings will be more valid e.g. genuinely responding with the points they wanted to award rather than just putting down the number they think they ought to;
- *Strength* can produce a valid test because children are less likely to question the procedure; e.g. adults might have wondered how they counted the dots so quickly and divided them up into groups;
- *Weakness (ethical)* creating competition is potentially damaging; even though the children didn't know who was in each group, they may learn to be more discriminatory because they have had to repeated choose between 'own' and 'other' group (and earned money for it);
- *Weakness* because in some situations, children may need special ways to be tested, e.g. they could only use fairly simple booklets of numbers with the boys whereas in adult life the expression of prejudice is much more complex than just ticking a box;

Nelson
- *Strength* because children are (likely to be) naïve to the hypothesis/unlikely to respond to demand characteristics/social desirability bias; the findings will be more valid e.g. genuinely say what they believe about the boy rather than just saying what they think they ought to;
- *Strength* because can compare children at different ages to see how moral development progresses; e.g. whether 3 year olds differ from 7 year olds in the use of motives and outcomes;
- *Weakness (ethical)* 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/the children may learn to use 'hitting on the head with a ball' when they are mad with a friend;
- *Weakness* because children may have poor understanding of language rather than moral concepts; so the differences might not have been due to differences in morality; however Nelson overcame this using pictures;

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