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PSYCHOLOGY **9698/13**

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MARK SCHEME

Maximum Mark: 80

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Section A

1 The study by Mann et al. looked for differences between behaviours in clips of suspects telling truths and lies.

(a) Identify <u>two</u> behaviours that did <u>not</u> show a difference between truths and lies. [2]

Gaze aversion; head movements; hand / arm movements (I.e. illustrators, self manipulations, and hand / finger movements); speech disturbances;

1 mark per behaviour × 2

NB Do not accept 'fidgeting' but accept descriptions of behaviours.

(b) Explain what can be concluded from these results. [2]

That liars have individual differences;
so there is not a particular set of behaviours associated with lying;
we should be cautious about believing that we 'know' when someone is lying from their body language;

1 mark partial (brief explanation)
2 marks full (detailed explanation)

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

(a) Describe the research method used in the study comparing the active and passive kittens. [2]

- Experiment / laboratory experiment / true experiment;
- IV and DV *or*
- IV manipulated
- DV measured
- looking for differences
- investigates causal relationships
- controls employed

1 mark partial (identifying experiment only)
2 marks full (some detail – two or more points above)

NB Answer does not have to be contexualised.

(b) Suggest <u>one</u> advantage of this research method in this study. [2]

Controls; e.g. the apparatus ensured the passive kitten had exactly the same visual experience as the active one; the pairs of kittens were litter mates (so were genetically similar / so differences between them must have been due to the apparatus)

1 mark partial (identifying an advantage)
2 marks full (advantage related to study)

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

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

Provision of a glossary; explaining what each target word and foil in the eyes test meant; eyes test stimuli excluded if less than 50% of participants chose the target word; or if more than 25% selected any one of the foils;

Allow: matching of IQ in groups 1 and 4 (AS and general pop)
Allow: Eyes test figures showed only the eye area; not the whole face / clothes

2 marks for one control.
1 mark for identifying the control, second mark for description.

NB Award 1 mark max for stating the obvious e.g. 'they all did the same eyes test'

NB No marks for control *condition* (e.g. group 3 / normal adults / students)

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

Most likely:
Glossary
to ensure that all participants understood the words in the eyes test, so each had an equal chance of correctly identifying the target emotion.

stimuli excluded
to be sure that the eyes clearly represented the target emotion; i.e. there was a consensus about the underlying mental state from the expression

Allow:
IQ matching
to ensure that differences were not due to underlying differences in intelligence; but must have been due to differences in mind blindness

So more of the face e.g. mouth could not be used to judge emotion

2 marks for explanation (i.e. saying what it is controlling for and/or how)

4 From the study by Milgram (obedience):

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

Answer needs figures and units for full marks.

1 mark partial: 'all went to 300V', '26/40 went to max'
2 marks: 'all 40 went to 300V', '26/40 went to the max voltage')

NB Must be a finding, not a description of how the quantitative data were obtained.

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

Most likely
nervous smiling / laughing; which participants were embarrassed about / explained was not because they were enjoying it.
seizure: uncontrollable / violent convulsions.

1 mark partial (identifying a described finding)
2 marks full (detail about a described finding)

NB both marks must be about one finding

5 Describe how the prisoners in the study by Haney, Banks and Zimbardo responded when offered parole. [4]

3 said yes / 2 said no;
after only 4 days;
even though they would lose the money they had earned;
which had been the original motive for participation;
but when told this would have to be discussed with the 'staff' they quietly went back to their cells;
because the power of the guards seemed real to them;

1 mark for each detail identified × 4

6 The study by Piliavin et al. (subway Samaritans) raised ethical issues.

(a) Outline <u>two</u> ethical guidelines that apply to this study. [2]

competence: being sufficiently experienced / qualified to take appropriate steps to ensure participant health
confidentiality: ensuring participants and their data remain anonymous
protection from psychological harm: ensuring that participant does not leave the study in a worse state of mental health than they arrived
protection from physical harm: ensuring that participant does not leave the study in a worse state of health than they arrived
right to withdraw: ensuing the participant is aware that they can leave at any time, regardless of payment, (and take their results away)
informed consent: ensuring that the participant knows what will happen and can therefore decide whether to agree to take part

naming / outline a guideline = 1 mark × 2

NB no marks for application of guideline to study in this question part
NB Accept any plausible guideline, e.g. (avoiding) deception, privacy.

(b) Explain how <u>one</u> of these guidelines was followed, or not followed, in the study. [2]

most likely
protection from psychological harm: participants might have been distressed by apparent ill health of victim; felt threatened by drunk; so would leave the study upset/afraid; although they could move to another carriage;
right to withdraw: participants could not leave because they were on a train; nor take their results away because they didn't know they were in a study; although they could move to another carriage;
informed consent: participants didn't know they were in a study so could not therefore decide whether to agree to take part;

1 mark partial (identifying a way in which a guideline was challenged / followed)
2 marks full (some elaboration about how / why it was challenged / followed)

NB relevant elaboration may come from describing how the problem was solved.

7 From the study by Tajfel (intergroup categorisation):

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

14 columns, 2 rows
numbers in top/bottom row were rewards / penalties for same or different group;
participants chose a pair of numbers (ie a column)
matrices maximised different relationships (MIP/MJP/MD)

1 mark partial, 2 marks full (some detail – a drawing may earn full marks)

(b) Explain <u>one</u> advantage of collecting quantitative data. [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 in-group / out-group)

1 mark partial (brief advantage)
2 marks full (some expansion, does not have to be contextualised, but may be).

8 From the study by Freud (little Hans):

(a) Describe how data were collected about little Hans. [2]

most likely
observation of and questions asked to Hans by his father; interpretation of Hans's behaviour / comments; reported this information to Freud (via letter): received letters from Freud detailing further questioning;
through self report;

1 mark partial (brief description), 2 marks full (detailed description)

(b) Explain <u>one</u> advantage of collecting data in this way. [2]

most likely
Hans was likely to say things to his father (that he wouldn't say to someone he didn't know); so likely to get detailed information;
his father knew Hans well; so likely to be able to notice changes in his behaviour
self report provides rich details straight from the individual; so is valid;

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

9 Fig. 1 shows the cartoon used in study by Nelson (children's morals) in the 'picture motive-explicit' condition.

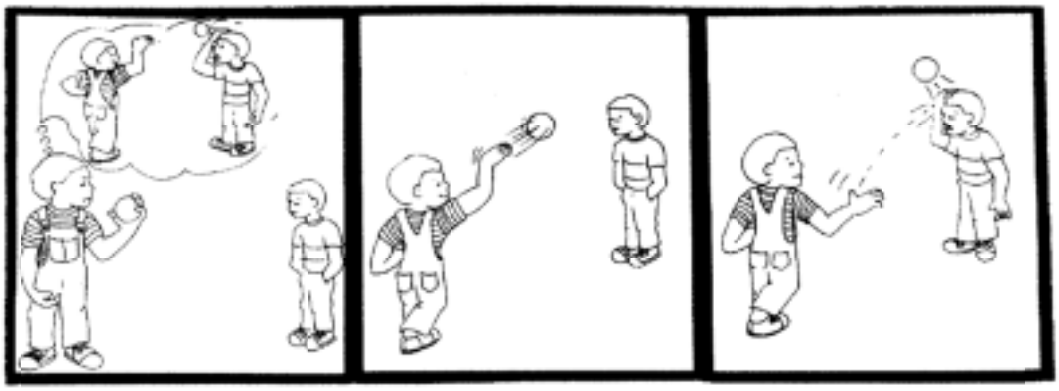


Fig. 1

(a) Describe the story illustrated by this cartoon. [2]

This boy was playing with a ball; he was very mad at his friend that day; He wanted to throw the ball at his friend so he could hit him on purpose / the intention was bad;

1 mark partial (brief description), 2 marks full (story refers to wanting to hit friend)

(b) Describe how the cartoon in the 'picture motive-implicit' condition differed from the one shown. [2]

No thought balloon; so the intention / motive wasn't apparent;
Could only judge by facial expressions;

1 mark partial (brief description), 2 marks full (some detail, e.g. both ideas above)

NB Reference to accidentally hitting his friend is irrelevant (= *good* motive, not motive-*implicit*)

10 In the study by Dement and Kleitman, participants reported the content of their dreams and had their eye movements monitored.

(a) State how the eye movements in the 'ladders' dream differed from the eye movements in the 'tomatoes' dream. [2]

ladders = vertical; tomatoes = horizontal;

1 mark per correct direction × 2

(b) Explain why there were differences in eye movements in these two dreams. [2]

because eye movements are related to dream content; so because the content was different, the eye movements would be as well; so for example in the tomatoes one they were dreaming about people throwing tomatoes to each other / in the ladders one they were dreaming about climbing up a series of ladders and looking down;

1 mark partial (brief explanation)
2 marks full (some detail, e.g.explanation of dream content)

11 In the study by Maguire et al. (taxi drivers), two different brain scanners were used to collect quantitative data.

(a) Outline how <u>one</u> of these brain scanners works. [2]

PET (scanner); detects activity in the brain / detects radioactive decay of tracer / gives functional information about the brain;
MRI (scanner); detects brain areas (such as the hippocampus) / allows localisation of brain areas / detects movement of water molecules caused my electromagnetic energy / gives structural information about the brain;

1 mark partial (naming apparatus / very brief description only)
2 marks full (*either* named apparatus plus very brief description *or* detailed description without name or with incorrect name)

(b) To what extent are the quantitative data produced by this piece of apparatus reliable? [2]

highly reliable because the equipment is scientific / the measure is objective;
so it would produce the same results each time / it wouldn't depend on the researcher's opinion / it doesn't need to be interpreted (very much); participants cannot falsify (which would introduce variation);

1 mark partial (brief explanation), 2 marks full (some detail)
NB Not being able to respond to demand characteristics would improve validity not reliability (so 0 marks)

12 Describe <u>two</u> ways in which the study by Rosenhan (sane in insane places) could be said to have high ecological validity. [4]

because staff were unaware of the role of the pseudopatients (in study 1); their behaviour could not have been a response to demand characteristics / was normal for the situation;
because a range of hospitals / different staff was considered; the results were likely to generalise to a range of hospitals / staff roles;
because a range of pseudo-patients was used (age / gender / occupation); the results are likely to generalise to the wider population;

1 mark partial (brief reason for high validity), 2 marks full (some detail) × 2

NB the marks are for high ecological validity, so no marks if the opposite is argued.

13 Describe <u>two</u> of Thigpen and Cleckley's conclusions from their study of multiple personality disorder. [4]

Most likely
the patient had multiple personalities (EW, EB and Jane); and these were distinguishable in terms of IQ / behaviour / handwriting / EEG;
some personalities were aware of others; e.g. Eve Black was aware of Eve White;
the patient was unable to recall behaviours performed by some personalities; e.g. she couldn't remember things that EB had done;

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

NB It is a case study, so conclusions, although general, may refer to examples from the case

14 The study by Billington et al. (empathising and systemising) used self report questionnaires to collect data.

(a) Describe <u>one</u> advantage of using self reports in this study. [2]

Most likely
can access things (for the SQ) that can't be observed; like whether the participant is interested in grammatical rules;
can ask about emotions (for the EQ) that can't be tested; e.g. how somebody feels when watching a film;

1 mark partial (advantage identified)
2 marks full (advantage related to study).

e.g. measure things that are impossible to see. (1 mark)
measure things like organised thinking that are inside someone's head so can't be assessed directly (2 marks)

(b) Describe <u>one</u> disadvantage of using self reports in this study. [2]

Most likely: not accurate, subjective. Participants may respond to demand characteristics / may lie;

1 mark partial (disadvantage identified)
2 marks full (disadvantage related to study).

e.g. The participants could have just lied (1 mark)
The participants could have lied on the EQ/SQ about what they would like/what they do (2 marks)

15 From the study by Veale and Riley (mirror gazing):

(a) Describe how the use of different types of reflective surfaces was investigated. [2]

asked if they used a series of mirrors for different profiles;
and if they used reflective surfaces other than mirrors;
using a questionnaire = 1 mark

1 mark partial (simple description)
2 marks full (some detail)

(b) Describe the results about the use of different types of reflective surfaces. [2]

BDDs were more likely than controls to use a series of mirrors / with different profiles; than controls; 22/42 (52.4%) compared to 1/15 (6.7%);
In short sessions both BDDs and controls used shop windows;
BDDs used reflective surfaces other than mirrors; e.g. car mirrors / vehicle windows / vehicle bumpers / cutlery / fish knives / TV screens / table tops / watch faces / taps / CDs;
preferred small / cracked / dusty / dirty; for a partial view (to avoid defect);
avoided public mirrors; used only private ones (as less distressing);

1 mark partial (one result, briefly)
2 marks full (two results, or one result in detail e.g. numbers or comparison)

Section B

16 Discuss <u>one</u> of the studies listed below in terms of its weaknesses.

Loftus and Pickrell (false memories)
Nelson (children's morals)
Schachter and Singer (emotion) **[10]**

No marks for description of study.
Max 5 if only about one weakness.

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 weaknesses limited to one (i.e. lacks breadth) **or** points lack depth. The answer is general rather than focused on study but shows some understanding.	4–5
Two or more weaknesses 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 **type** of weaknesses (e.g. ethical, methodological etc.) and weaknesses are focused on the study. Discussion is balanced with good understanding and clear expression.	8–10

Loftus and Pickrell

- *Not reliable* because some measures were less objective, such as self-reported confidence;
- *Not valid* because participants' responses may just have been due to demand characteristics, they may not have actually recalled the event at all;
- *Unethical* because participants may have been distressed to learn that they had been misled; they might feel embarrassed or foolish;
- *Unethical* because participants may have been worried that they could be so easily misled;

Nelson

- *Not reliable* because children may interpret the faces scale differently;
- *Not valid* because all participants were from middle class, urban backgrounds and the findings may not generalise to children with different home experiences;
- *Unethical* because participants may have thought that it was okay to throw a ball at someone to hit them because you are mad at them;
- *Unethical* because although the parents gave permission, the children were 'told to listen carefully…' so had no choice;

Schachter and Singer

- *Not reliable* because the self report measure of mood/physical condition (0 to 4) was subjective; e.g. not everyone who responded 'I feel extremely agitated' would feel exactly the same way;
- *Not reliable* because there were individual differences in the responses to epinephrine; so the results would be inconsistent and all the participants wouldn't experience the same effects;
- *Not valid* because although 11 participants' findings were omitted because they said they were very suspicious, other participants (who didn't say) might also have guessed the aim; so responded to demand characteristics;
- *Unethical* because participants were deceived about the nature of the injection; and the effects it would have;
- *Unethical* because participants were deliberately annoyed; and were genuinely distressed by the nature of the questions;
- *Not generalisible* because only male participants; and males and females differ emotionally;

17 The same aim may sometimes be tested using humans and animals.

Evaluate the extent to which humans and animals could be used effectively using <u>one</u> of the studies listed below.

Bandura et al. (aggression)
Langlois et al. (infant facial preference)
Demattè et al. (smells and facial attractiveness) **[10]**

No marks for description of study.
Max 5 if only about either humans or animals.

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 only humans or only animals **or** points lack depth. The answer is general rather than focused on study but shows some understanding.	4–5
Both human and animal approaches are considered and these are focused on the aim of 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 across human and animal approaches (e.g. different methodological issues, ethics) and the answer is focused on the aim of the study. Discussion is balanced with good understanding and clear expression.	8–10

NB accept ethical as well as methodological points as a study may be ineffective because it is unethical.

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Bandura et al.

- *Humans* effective because some types of aggression shown in the study, e.g. with guns, is characteristically human;
- *Animals* effective because simpler so less likely to be influenced by demand characteristics / social desirability; i.e. not likely to think that the adult is 'showing' them what to do;
- *Humans* less effective because may be difficult to tell whether behaviour is real aggression or just play aggression;
- *Animals* less effective because the nature of aggression in animals is different; it is motivated by food/competition; rather than by frustration;
- *Unethical with humans* because children could be encouraged to behave aggressively; no effort was made to return their behaviour to normal afterwards;
- *Unethical with animals* because animals may experience pain if they act aggressively towards another animal;
- *Ethical with animals* because it may not matter if they are more aggressive afterwards;

Langlois et al.

- *Humans* effective because facial attractiveness is visual, and humans are more visual than animals; in many animals attraction is based on smell;
- *Animals* effective because simpler so less likely to be influenced by effects of early learning; children may already have ideas about attractiveness e.g.from TV even at 6 months;
- *Humans* less effective because difficult to tell whether increased looking is due to attraction or something else, such as fascination because they are ugly;
- *Animals* less effective because the nature of animals are typically only attracted to each other for breeding (so only at certain times); not for friendship;
- *Unethical with humans* because children had to sit for a long time doing the same thing and this may have been distressing;
- *Unethical with animals* because animals would have had to have been restrained to make them watch the pictures for so long, which might have been distressing;

Demattè et al.

- *Humans* effective because facial attractiveness is visual, and humans rely on vision as well as smell;
- *Animals* effective because simpler so less likely to be influenced by demand characteristics / social desirability; i.e. to try to work out what the smells are meant to 'make them do';
- *Humans* less effective because many other factors may affect attractiveness (other than smell and vision); such as personality / voice;
- *Animals* less effective because in nature animals are typically only attracted to each other for breeding (so only at certain times); and are mainly attracted by smell, not vision;
- *Animals* less effective because more difficult to assess 'attraction'; couldn't do it by self report, would have to do it by attempts to mate;
- *Unethical with humans* because children had to sit for a long time doing the same thing and this may have been distressing;
- *Unethical with animals* because animals would have had to have been restrained to make them sit by the olfactometer and look at the faces, which might have been distressing.

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