



General Certificate of Education

Psychology 1181
Specification A

**Unit 1 (PSYA1) Cognitive Psychology,
Developmental Psychology
and Research Methods**

Mark Scheme

2009 examination - June series

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PSYA1 Cognitive Psychology, Developmental Psychology and Research Methods

SECTION A: COGNITIVE PSYCHOLOGY AND RESEARCH METHODS

Question 1

AO1 = 6 marks Accurate explanation of each technique

The main techniques used in the cognitive interview are summarised below.

Context reinstatement - trying to mentally *recreate* an image of the situation, including details of the environment, such as the weather conditions and the individual's emotional state including their feelings at the time of the incident.

Recall from changed perspective – trying to mentally recreate the situation from different points of view eg describing what another witness present at the scene would have seen.

Recall in reverse order – the witness is asked to recall the scene in a different chronological order eg from the end to the beginning.

Report everything – the interviewer encourages the witness to report all details about the event, even though these details may seem to be unimportant.

Other techniques, including those used in enhanced cognitive interviews, should be credited.

In both cases, 1 mark for identifying an appropriate technique and 2 further marks for accurate elaboration.

Question 2 a

AO2 = 4 Marks Application of knowledge of WMM

The visuo-spatial scratchpad (sketchpad) stores/manipulates visual and spatial information and will be active when the person is doing a visual task. The phonological loop, comprising the phonological store (inner ear) and articulatory control system (inner voice) will be active during a verbal task.

1 mark for accurate identification of at least two components, eg central executive, visuo-spatial sketchpad/scratchpad and phonological loop (or a sub-component). Credit an accurate diagram.

1 mark for a very brief or muddled explanation.

Up to 2 further marks for an accurate explanation.

Question 2 b

AO2 = 2 marks Application of knowledge of WM

Likely examples for a verbal task include learning/repeating words, speaking and reading. Visual tasks include forming an image of something and answering questions about it or mentally counting the windows of a house, watching DVD, reading.

Credit any acceptable tasks which are clearly verbal or visual.

To be appropriate in this context, the verbal and visual tasks must be different. However, some tasks, eg reading, could be verbal or visual.

Question 3 a

AO3 = 2 marks Correct identification and justification

Identification of the mean or median.

There are no repeated scores in either list, so the mode would not be appropriate.

Justification for the mean could be that it used all of the available data, that it is a powerful/sensitive measure or that it is suitable for use with interval/ratio data.

Justification for using the median is that it is relatively unaffected by outlying scores.

Question 3 b

AO3 = 2 marks Outline of sampling method

The specification names random, opportunity and volunteer sampling. Answers must relate to volunteer sampling which involves participants selecting themselves.

1 mark: very brief suggestion, eg put up a notice.

2 marks: some elaboration that could apply to the scenario, eg advertise on the staff room notice board, asking teachers to sign a list.

Question 3 c

AO3 = 1 mark Identification of extraneous variable

Extraneous variables are anything other than the independent variable that could affect the dependent variable. In this study they could include participant differences, environmental variables such as temperature or noise, and experimenter variables including the way in which the research is conducted.

Question 3 d

AO3 = 2 marks Identification of control

The control must relate to the variable in (c).

1 mark for a brief suggestion. Second mark for some elaboration.

For example, control for participant differences by making sure both groups are similar (1 mark).

Control for participant differences by randomly assigning the participants to conditions.
(2 marks)

Question 3 e i**AO3 = 2 marks**

Candidates can refer to any appropriate strategy relating to short-term or long-term memory, except organisation. Likely strategies include imagery (possibly specific examples such as peg words or method of loci) or deep processing. Context/state dependent recall is appropriate. Methods which involve a different strategy are acceptable, even if they include an element of organisation, eg mind maps or elaborative rehearsal.

1 mark for identifying a strategy, 1 further mark for elaboration.

Question 3 e ii**AO3 = 1 mark**

Independent groups, repeated measures and matched pairs are all acceptable. (Accept independent, repeated and matched designs.) Design may be named or described.

Question 3 e iii**AO3 = 2 marks**

0 marks for incorrect identification.

1 mark if one or both are not fully operationalised

Eg, IV – method of loci and/or DV – recall.

2 marks if both are fully operationalised

Eg, IV – instructions to use method of loci or not. DV – number of words recalled.

Question 4**AO1 = 6 marks****Description of relevant research****AO2 = 6 marks****Evaluation of relevant research****AO1**

Candidates must discuss research where the anxiety component is clear.

Candidates might refer to the Yerkes-Dodson law which suggests moderate anxiety is associated with better recall than very high or very low anxiety.

In Loftus's (1979) weapon focus experiment more participants correctly identified a person when they were holding a pen (49%) than when they were holding a knife covered in blood (33%). Loftus and Burns (1982) found participants who saw a violent version of a crime where a boy was shot in the face had impaired recall for events leading up to the incident.

However, in a real life study Yuille and Cutshall (1986) found witnesses who had been most distressed at the time of a shooting gave the most accurate account five months later. Also Christianson and Hubinette (1993) found victims of genuine bank robberies were more accurate in their recall than bystanders.

AO2

Evaluation might relate to the contradictory nature of the research, possibly linked to lack of ecological validity in laboratory studies. Problems of control might also be relevant, eg in Yuille & Cutshall's study those who experienced the highest levels of stress were closer to the event, which might have helped their recall. Ethical issues could also be relevant as could the practical applications of research.

AO1 Knowledge and understanding	AO2 Application of knowledge and understanding
<p>6 marks Accurate and reasonably detailed Accurate and reasonably detailed description that demonstrates sound knowledge and understanding. There is appropriate selection of material to address the question. Presentation of information is clear and coherent.</p>	<p>6 marks Effective evaluation Effective use of material to address the question and provide informed commentary. Effective evaluation of research. Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. Clear expression of ideas, good range of specialist terms, few errors of grammar, punctuation and spelling.</p>
<p>5-4 marks Less detailed but generally accurate Less detailed but generally accurate description that demonstrates relevant knowledge and understanding. There is some evidence of selection of material to address the question. Information is presented in an appropriate form.</p>	<p>5-4 marks Reasonable evaluation Material is not always used effectively but produces a reasonable commentary. Reasonable evaluation of research. A range of issues and/or evidence in limited depth, or a narrower range in greater depth. Reasonable expression of ideas, a range of specialist terms, some errors of grammar, punctuation and spelling.</p>
<p>3-2 marks Basic Basic description that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. There is little evidence of selection of material to address the question. Information is not presented in an appropriate form.</p>	<p>3-2 marks Basic evaluation The use of material provides only a basic commentary. Basic evaluation or research. Superficial consideration of a restricted range of issues and/or evidence. Expression of ideas lacks clarity, some specialist terms used, errors of grammar, punctuation and spelling detract from clarity.</p>
<p>1 mark Very brief/flawed Very brief or flawed description that demonstrates very little knowledge or understanding of research. Selection and presentation of information is largely or wholly inappropriate.</p>	<p>1 mark Rudimentary evaluation The use of material provides only a rudimentary commentary. Evaluation of research is just discernible or absent. Expression of ideas poor, few specialist terms used, errors of grammar, punctuation and spelling often obscure the meaning.</p>
<p>0 marks No creditworthy material presented.</p>	<p>0 marks No creditworthy material presented.</p>

SECTION B: DEVELOPMENTAL PSYCHOLOGY AND RESEARCH METHODS

Question 5 a

AO3 = 1 mark Identification of a positive correlation, +, +ve

Question 5 b

AO3 = 4 marks Outline of relevant strength and weakness

The strength and weakness must be appropriate for investigating day care.

1 mark for stating a relevant strength/weakness. A further mark for some elaboration which would apply to day care.

For example, a strength would be it is an ethical way of collecting data (1 mark) because there is no manipulation of time the child spends in day care (2 marks).

A weakness you can't infer cause and effect (1 mark) because you can't be sure that time in day care causes the child to be disobedient (2 marks).

Question 5 c

AO2 = 4 marks Application of knowledge of day care

Relevant characteristics include:-

- Good interactions between children and staff
- An appropriate curriculum
- Appropriate caregiver/children ratio
- Appropriate staff training
- Low staff turnover.

1 mark for brief outline eg in high quality day care carers will not have too many children to look after.

Second mark for some elaboration, eg this will allow caregivers to interact with the children and spend time talking to them.

Question 5 d

AO1 = 4 marks

Outline of knowledge of effects on peer relations

Generally the effects of day care on peer relations is positive. For example, Field (1991) found the more time children spent in day care, the more friends they had. The EPPE project (2003) looked at large numbers of children in different types of pre-school provision and found high quality care was associated with greater sociability with other children. However, Dilallo (1988) found children who spend more time in day care were less co-operative and helpful in their relations with other children. Length of time in day care may be a factor as Campbell *et al* (2000) found children who were in care for a long time each day were less socially competent than children who spent shorter days in care.

Candidates may report older studies. This is acceptable as long as they are of day care (not institutionalisation) and relate to peer relationships. Candidates who refer to aggression would need to make a link with peer relations.

Anecdotal answers which contain relevant material but no identifiable study should be restricted to 1 mark.

For example, children who go to day care have more friends than children who stay at home (1 mark).

2 marks – brief reference to evidence from one relevant, identifiable study of effects of day care on peer relations.

3 - 4 marks – accurate and reasonably detailed outline of what one or more relevant studies have shown us about the effects of day care on peer relations.

Question 6 a

AO1 = 2 marks

Appropriate definition

Attachment is a strong, enduring, emotional and reciprocal bond between two people, especially an infant and caregiver.

1 mark for a brief definition, eg an emotional bond.

1 further mark for some elaboration as above.

Question 6 b

AO1 = 2 marks

Correct identification of A and C

1 mark for each correct tick.

0 marks if more than 2 boxes are ticked.

Question 7 a

AO2 = 4 marks Application of knowledge of the effects of institutionalisation

As Luca was in a poor quality orphanage for four years cognitive impairment is likely. Answers could also refer to Bowlby's MDH and possible consequences such as affectionless psychopathy and problems with later relationships. Reactive attachment disorder and physical effects would also be relevant.

1 mark or 2 marks for identification of possible negative effect(s), eg Luca may have problems forming relationships. [1 mark for identifying one negative effect, 2 marks for identifying two or more.]

Up to 2 additional marks for some elaboration of two or more effects or a more detailed elaboration of one effect.

Question 7 b

AO3 = 4 marks Outline of strength and limitation of research method

Strengths Rich data, high ecological validity, investigates a situation which could not be set up for ethical reasons.

Limitations Selection from large amounts of data may lead to observer bias.
Findings from one individual can't be generalised to others.

1 mark each for identification of a strength/limitation. Second mark for some elaboration.

For example, an advantage of a case study is that it provides lots of detail (1 mark). This gives great depth and understanding of this single individual (2 marks).

Question 7 c

AO1 = 4 marks Outline of relevant study

Studies must relate to disruption of attachment, so those relating to privation or isolation would not be relevant.

Robertson and Robertson (1989) studied John who showed protest and despair when he spent 9 days in a residential nursery.

Older studies such as Spitz and Wolf (1946) and Bowlby's (1944) juvenile thieves would also be relevant.

1 mark for identification of a relevant study.

Up to 3 further marks for some elaboration.

Question 8 a

AO3 = 3 marks Description of demand characteristics in this research

Infants would be too young to respond to demand characteristics.

1 mark for a brief reference to mothers changing their behaviour or the cues in the investigation which lead to the change. 2 further marks for elaboration.

For example, the mothers' behaviour may change (1 mark). The mothers try to guess what the psychologist is looking at (1 mark), so they may be more attentive to their babies than when they are not taking part in this research (1 mark).

Question 8 b

AO2 = 4 marks Explanation of difference

Answers must focus on a difference. Candidates who simply describe secure or insecure attachment can gain a maximum of 1 mark. Candidates who do not explicitly compare behaviour of securely attached and insecurely attached infants can gain a maximum of 2 marks.

Candidates may refer to different types of insecure attachment, but this is not necessary for full marks.

Answers may focus on the infants' exploration behaviour, behaviour towards a stranger or behaviour when re-united with their mother.

Candidates may focus on one difference in detail, or more than one more briefly.

For example, securely attached infants stopped exploring the room when their mother left (1 mark) but insecurely attached infants didn't react to her leaving (2 marks).

For further marks candidates could elaborate on this difference, or refer to a second difference in similar detail.