

Cambridge International Examinations

Cambridge International Advanced Subsidiary and Advanced Level

PSYCHOLOGY 9698/22

Paper 2 Core Studies 2 May/June 2017

MARK SCHEME
Maximum Mark: 70

Published

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 2017 series for most Cambridge IGCSE[®], Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

® IGCSE is a registered trademark.



Answer	Marks
Dement and Kleitman used the experimental method to investigate sleep and dreaming. An alternative method could be used to improve the ecological validity of the study.	5
Describe the features of the experimental method in psychology. Any five correct points, 1 mark for each point up to a maximum of five points. Marks can be awarded for both identifying the type of experiment and giving a definition.	
Indicative content: have an IV and/or DV = 1 mark (laboratory experiments) take place in a controlled/artificial environment/has controls (field experiments) take place in the natural environment Can be (Quasi experiment) where the IV is naturally occurring within the participant Can be (Natural experiment) where the IV is naturally occurring within the environment Can be (True experiment) where the IV is manipulated by the experimenter Experimental design can be RMD/IMD/MP	
The IV is the manipulated variable and the DV is measured = 3 marks The IV is manipulated OR DV is measured = 2 marks The IV is the 'cause' and the DV is the 'effect' = 3 marks	
Ignore evaluative comments like ecological validity	
Any other appropriate point	
Design a more ecologically valid alternative way to study sleep and dreaming, and describe how it could be conducted. Candidates need to describe the who, where, what and how.	10
Major omissions include the what and how and where. Candidates must describe what data would be collected (e.g. dream content, estimated length of time asleep etc.) and how (e.g. self report, observation, EEG etc.) and a venue that is not based in a laboratory (as the question is about ecological validity).	
Minor omission is the who	
It is possible to achieve 9 marks with a small minor omission (e.g. sampling method)	
Any method may be used other than experiments (lab, field, quasi)	
Major omissions: Studies that are 'purely' in the laboratory with no improvement in ecological validity. If clearly not investigating dreaming (e.g. just about sleep but nothing about dreaming). If the study is very unethical (e.g. entering someone's bedroom without their	
	Dement and Kleitman used the experimental method to investigate sleep and dreaming. An alternative method could be used to improve the ecological validity of the study. Describe the features of the experimental method in psychology. Any five correct points, 1 mark for each point up to a maximum of five points. Marks can be awarded for both identifying the type of experiment and giving a definition. Indicative content: have an IV and/or DV = 1 mark (laboratory experiments) take place in a controlled/artificial environment/has controls (field experiments) take place in the natural environment Can be (Quasi experiment) where the IV is naturally occurring within the participant can be (Natural experiment) where the IV is naturally occurring within the environment Can be (True experiment) where the IV is manipulated by the experimenter Experimental design can be RMD/IMD/MP The IV is the manipulated variable and the DV is measured = 3 marks The IV is manipulated OR DV is measured = 2 marks The IV is the 'cause' and the DV is the 'effect' = 3 marks Ignore evaluative comments like ecological validity Any other appropriate point Design a more ecologically valid alternative way to study sleep and dreaming, and describe how it could be conducted. Candidates need to describe the who, where, what and how. Major omissions include the what and how and where. Candidates must describe what data would be collected (e.g. dream content, estimated length of time asleep etc.) and how (e.g. self report, observation, EEG etc.) and a venue that is not based in a laboratory (as the question is about ecological validity). Minor omission is the who It is possible to achieve 9 marks with a small minor omission (e.g. sampling method) Any method may be used other than experiments (lab, field, quasi) Major omissions: Studies that are 'purely' in the laboratory with no improvement in ecological validity. If clearly not investigating dreaming (e.g. just about sleep but nothing about dreaming).

© UCLES 2017 Page 2 of 10

Question	Answer		Marks
	Alternative study is incomprehensible.	0	
	Alternative study is muddled and impossible to conduct.	1–2	
	Alternative study is muddled but possible and/or there are major omissions.	3–4	
	Alternative study is clear with a 2+ minor omissions and is possible.	5–6	
	Alternative study is described with one minor omission and in some detail.	7–8	
	Alternative study is described in sufficient detail to be replicable.	9–10	
1(c)	Evaluate this alternative way of studying sleep and dreaming in practice thical terms. Candidates need to consider a number of points regarding their study. These can be positive and/or negative. Appropriate points could include a discussion about: ethics of the study ecological validity of the study poor/strong validity due to data collection method chosen poor reliability due to lacking in controls social desirability/demand characteristics if participants realise they are study strengths and weaknesses of qualitative/quantitative data collected researcher bias generalisability of sample practical issues of studying sleeping and dreaming any other appropriate point Do not credit 'increased ecological validity' without explanation, as this is giv Q1(b). In order to achieve higher marks the candidate must link their points to their investigation described in part (b).	e points in a	10
	No evaluation.	0	
	Evaluation is muddled and weak.	1–2	
	Evaluation is simplistic and not specific to the investigation.	3–4	
	Evaluation is simplistic but specific to the investigation (may include general evaluation). May include one detailed point.	5–6	
	Evaluation is good and specific to the investigation. Two or more points that cover both a practical and an ethical issue.	7–8	
	Evaluation is detailed and directly relevant to the investigation. Two or more points that cover both a practical and an ethical issue.	9–10	

© UCLES 2017 Page 3 of 10

Question	Answer	Marks
2(a)	Schachter and Singer conducted a study to investigate the two-factor theory of emotion.	2
	What is meant by the term 'reliability' in psychology? 1 mark partial, 2 marks full	
	1 mark responses Consistency, highly controlled, etc.	
	Reliability is the (internal) consistency of the measuring device – 2 marks It refers to the ability to replicate a study and achieve similar/same results – 2 marks	
2(b)	Explain how one feature from the Schachter and Singer study contributed to the reliability of the study. 1–2 marks partial 3 marks full (explain why the feature increased the reliability of the study).	3
	Features could include: same self report questionnaire (with the same questions) given stooge did the same behaviour for each participant same amount of epinephrine given to the participant participants in each condition were told the same thing same behavioural checklist used during observation same questionnaire answered in the angry condition any other appropriate response	
	To achieve 2 marks, the feature must be described in detail and 3 marks, an explanation needs to be given as to why this feature increases the reliability of the study.	
	Participants were given the same questionnaire = 1 mark Participants were given the same questionnaire including a Q about 'listing their childhood diseases' = 2 marks Participants were given the same questionnaire including a Q about 'listing their childhood diseases' and this enabled the study to be internally consistent/replicable = 3 marks	
	The stooge showed the same behaviours = 1 mark The stooge showed the same behaviours, for example throws a paper plane at the participant = 2 marks The stooge showed the same behaviours, for example throws a paper plane at the participant and this enabled the study to be internally consistent/replicable = 3 marks	

© UCLES 2017 Page 4 of 10

Question	Answer		Marks
2(c)	Discuss the strengths and weaknesses of reliable research, using the Schachter and Singer study as an example. Appropriate strengths and weaknesses will be varied. These could include Strengths:		10
	 controlled, therefore can be replicated consistent for each participant (standardisation) can show a cause and effect relationship more scientific objectivity increased (e.g. through inter-rater reliability) research can be useful 		
	Weaknesses: lacks ecological validity (as mainly experimental) difficult to ensure everything is exactly the same for each participant although the feature might be the same, the participants will react diffe if too artificial can give way to demand characteristics Any other appropriate point	rently to it	
	No comment on the strengths and weaknesses of reliable research.	0	
	Comment given but muddled and weak.	1–2	
	Consideration of at least a strength and a weakness not specific to investigation. OR Consideration of either a strength/weakness that is specific to reliable research and investigation (could be two strengths and/or two	3–4	
	weaknesses on its own).		
	Consideration of two or more points (at least one strength and one weakness) which are clear and specific to investigation.	5–6	
	Consideration of at least two strengths and two weaknesses which are clear and specific to investigation.	7–8	
	Consideration of at least two strengths and two weaknesses which are good and directly relevant to the investigation.	9–10	

© UCLES 2017 Page 5 of 10

Question	Answer		Marks
2(d)	 Discuss the extent to which the Schachter and Singer study is ethical. It is ethical: Schachter and Singer checked the medical records of the participants to sure they were physically healthy. The study was monitored by a medical professional. A debrief was given at the end (after the self-report). 		10
	 It is not ethical: Participants were deceived. Although informed consent was given it was for a study investigating the of vitamins on vision and not the two factor theory of emotion. Participants were unaware they were being observed while with the storage Participants could have had an underlying health condition that was no revealed in their medical records and an adverse reaction to the epinem. The questions asked in the angry condition were very personal. A balanced argument is not required to achieve full marks.	oge. t	
	No comment on ethics.	0	
	Very brief comment on ethics (whether specific to investigation or not) or describing guidelines in no context of investigation.	1–2	
	OR consideration of ethics which is simplistic but specific to investigation.	3–4	
	Consideration of ethics is simplistic but specific to investigation and somewhat detailed. This could include one point. OR Consideration of ethics is detailed but not specific to investigation.	5–6	
	Consideration of ethics is good but brief (2 or more points) and specific to investigation. OR Consideration of ethics with one issue which is detailed and directly relevant to the investigation and the other issue(s) is more simplistic.	7–8	
	Consideration of ethics (2 or more points) which is detailed and directly relevant to the investigation.	9–10	

© UCLES 2017 Page 6 of 10

Question	Answer		Marks
3(a)	Outline what is meant by 'application to everyday life' in psychology. 1 mark partial 2 marks full		2
	Usefulness – 1 mark (partial) This is whether research is useful and can improve the lives of people in the day lives. – 2 marks (full)	ir day to	
Using t	he studies from the list below, answer the questions which follow:		
Loftus	n and Cleckley (multiple personality disorder) and Pickrell (false memories) and Riley (mirror gazing)		
3(b)	Describe how each of these studies could be applied to everyday life. Indicative content: Most likely answers (any appropriate answer receives cre	edit):	9
	Thigpen and Cleckley: Suggests a therapy method that could be used with other patients with MPD Patients could be given hypnosis and talk therapy to help them understand t personalities and also reveal to the patient their condition. For example, EW about EB as part of the therapy.	he	
	Loftus and Pickrell: Useful to the police and to courts. Makes these bodies aware that individuals have false memories and also how these false memories might develop. Also useful to therapists. For example, 29% of the participants remembered events (of being lost in the mall).		
	Veale and Riley: Useful to the patients, doctors, therapist and family of patients. Increases understanding of the issue. Helps everyone mentioned to be aware of the issuan help with diagnosis and also treatment. For example, the study identifies average 'long session' in front of mirror for BDD vs. controls.		
	For each study		
	No answer or incorrect answer.	0	
	Identification of point relevant to question but not related to study or comment from study but no point about application to everyday life. The description may be very brief or muddled.	1	
	Description of point about application to everyday life. (Comment with lack of understanding.) A clear description that may lack some detail.	2	
	As above but with analysis (comment with comprehension) about application to everyday life from the study. A clear description that is in sufficient detail.	3	
	Max mark	9	

© UCLES 2017 Page 7 of 10

Question	Answer		Marks
3(c)	What problems may psychologists have when they try to apply their findings to everyday life? Emphasis on problem. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.		9
	Indicative content:		
	Study may lack ecological validity. Participants are aware they are in a study and show demand characteristics an social desirability. Problems with validity and reliability of data collected. Small sample group. If study is very realistic, may be unethical. Participants can lie. Problems with using qualitative/quantitative data. Any other appropriate problem.	d/or	
	Marks per point up to a MAXIMUM of three points.		
	No answer or incorrect answer.	0	
	Identification of problem.	1	
	Description of problem related to applying findings to everyday life OR a weak description of problem related to applying findings to everyday life and applied to a study.	2	
	Description of problem related to applying findings to everyday life and applied to the study effectively.	3	
	Max mark	9	

© UCLES 2017 Page 8 of 10

Question	Answer	Marks
4(a)	Outline what is meant by the 'developmental approach' in psychology. 1 mark partial, 2 marks full	2
	The developmental approach is the study of childhood. – 1 mark The developmental approach is the study of how behaviour changes as we a 2 marks.	ge. –
	Appropriate responses could also include assumptions of the developmental approach.	
Using t	the studies from the list below, answer the questions which follow:	
Freud (ra et al. (aggression) (little Hans) is et al. (infant facial preference)	
4(b)	Describe how the data were collected in each of these studies. Bandura et al.: Observations were made of the children behind a one-way mirror. Children w judged by two observers who used time sampling. Three measures of imitatio obtained – imitation of physical aggression, imitative verbal aggression and ir nonaggressive verbal response on a tally chart. Children were spoken to at the of the study to get their feedback on what they observed.	on were mitative
	Freud: Data was collected by little Hans' father through everyday conversations with son. The father recorded these conversations. The father then wrote to Freud	
	Langlois: Babies' mothers wore glasses and a light/buzzing noise was used to attract the infants attention to the screen, they were timed on how long they gazed at the slides of the adult women and adult men. Their visual fixations were recorded video monitor.	e colour
	For each study	
	No answer or incorrect answer.	0
	Identification of point relevant to question but not related to study or comment from study but no point about data collection. The description may be very brief or muddled.	1
	Description of point about data collection from the study. (Comment with lack of understanding.) A clear description that may lack some detail.	2
	As above but with analysis (comment with comprehension) about data collection. A clear description that is in sufficient detail.	3
	A clear description that is in sufficient detail.	

© UCLES 2017 Page 9 of 10

Question	Answer		Marks
4(c)	What are the weaknesses of the developmental approach in psychology? Emphasis on weakness. Answers supported with named (or other) studies. Each weakness does not need a different study; can use same study. Practical issues of studying children (e.g. language, attention span, fussing, etc.) Ethical issues of studying children. Often have to do a longitudinal study which is time consuming/over involvement psychologist. Children are eager to please and may show social desirability.)	9
	Lack of validity of data as children cannot express themselves fully. Laboratory studies can lack validity. Or any other relevant weakness.		
	Marks per point up to a MAXIMUM of three points.		
	No answer or incorrect answer.	0	
	Identification of relevant weakness.	1	
	Description of weakness related to developmental approach OR a weak description of a weakness related to developmental approach and applied to a study.	2	
	Description of weakness related to developmental approach and applied to the study effectively.	3	
	Max mark	9	

© UCLES 2017 Page 10 of 10