

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

Cambridge International Advanced Subsidiary and Advanced Level

**MARK SCHEME for the May/June 2015 series**

**9698 PSYCHOLOGY**

**9698/22**

Paper 2 (Core Studies 2), maximum raw mark 70

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 2015 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level components and some Cambridge O Level components.

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**Section A**

**1 Piliavin et al. (subway Samaritans) conducted a field study to investigate bystander behaviour. An alternative way to collect data would be to conduct a laboratory experiment.**

**(a) Describe the independent groups experimental design and outline how it was used in the study by Piliavin et al. [5]**

Definition (general) Maximum 2 marks	Application to Piliavin Maximum 3 marks
<p>This is where each group of participants takes part in different conditions/level of the IV = 1 mark</p> <p>This is where each group of participants takes part in <b>one</b> condition/level of the IV <b>only</b> = 2 marks</p> <p>They <b>only</b> participate in <b>one</b> condition/level of the IV = 2 marks</p> <p>Diagram as an example is acceptable.</p>	<p>Participants took part in one of the conditions only (give this credit if not already mentioned this for the generic description mark) either drunk or cane either black or white victim one of the model conditions (when this was used).</p> <p>List of the conditions without reference to the participants only being in one of these should be capped at 1 mark.</p> <p>Do not credit 'old' but credit can be given to 'ill/sick'.</p>

1 mark for each point up to a maximum of five points. 2 marks for the definition and 3 marks for the description of how it was used in Piliavin et al.

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- (b) Design an alternative way to investigate bystander behaviour which uses a laboratory experiment and describe how it could be conducted. [10]**

Candidates should describe the who, what, where and how.

Major omissions include the what (what the participant will go through during the study and how (how the DV will be measured).

Minor omissions include who and where (and the what and/or how if unclear can also count as a minor omission).

It is possible to achieve 9 marks with a small minor omission (e.g. sampling method).

If clearly a field experiment (where the study is taking place as part of the participants' everyday experience) this must be capped at 6.

Very unethical research must be capped at 4.

Must measure bystander behaviour otherwise cap at 2.

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 few minor omissions.	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

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- (c) Evaluate this alternative way of studying bystander behaviour in methodological and ethical terms. [10]

Indicative content:

Candidates need to consider a number of points regarding their study. These points can be both positive and/or negative.

Appropriate points could include a discussion about:

Difficulty in accessing a large sample of participants

Lack of generalisability

Could be unethical if situation is upsetting to participants (e.g. seeing someone fall over who is ill)

May have to deceive participants/not get informed consent depending on nature of study

Social desirability/demand characteristics

Validity of data collection technique

Reliability of data collection technique

Ecological validity

Any other appropriate point.

In order to achieve higher marks (5+) the candidate must link their points to their investigation described in part (b).

Candidates must discuss both methodological and ethical points to achieve 7+ marks.

To be considered specific to the investigation the response must be in context for a minimum of **two** separate points.

No evaluation.	0
Evaluation is muddled and weak.	1–2
Evaluation is simplistic and/or not specific to the investigation. May include one point that is brief and specific to the investigation.	3–4
Evaluation is simplistic but specific to the investigation (may include general evaluation). May include one very detailed point.	5–6
Evaluation is good and specific to the investigation. Two or more points. This must include both a point on methodological as well as ethical issues.	7–8
Evaluation is detailed and directly relevant to the investigation. Two or more points. This must include both a point on methodological as well as ethical issues.	9–10

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2 Billington et al. (empathising and systemising) conducted a self-report study to investigate cognitive style and subject choice in university students.

(a) What is meant by the ‘nature-nurture debate’? [2]

1 mark partial  
2 marks full

Examples of behaviours that are due to learning/biology can achieve up to a maximum of 1 mark.

If the candidate does not identify which is nature and which is nurture = 1 mark.

Example answer –

Nature is due to biology – 1 mark.

Whether behaviour is due to biological influences or learning. – 2 marks.

(b) Describe how the results of the Billington et al. study support either the nature or the nurture side of the debate. [3]

1–2 marks partial  
3 marks full (clearly explains why the study supports one side of the debate)

If response argues both sides of the debate credit the best response.

Examples

Possible response –

Men are born as systemisers – 1 mark

Men choose science subjects as they are born as systemisers. – 2 marks

The study shows that men are more systemising and women are more empathising. This could be due to genetic factors. Men may be born more systemising. – 3 marks.

Other possible responses

Men and women learn to be more systemising. – 1 mark

As there is not always a gender difference it could be that these traits come from learning. – 2 marks

We are born systemising or empathising and choose courses that suit our natural abilities. – 3 marks

If candidate identifies which side of the debate is supported with some evidence to back this up can achieve 1 mark.

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- (c) **Discuss the strengths and weaknesses of the individual differences approach using the study by Billington et al. as an example.** [10]

Appropriate strengths and weaknesses will be varied. These could include:

**Weaknesses**

- Does not provide general explanations of behaviour
- Often self report studies which can show social desirability/demand characteristics
- Can provide reductionist explanations that do not take into consideration factors other than individual differences
- Can reveal things about the participant that they might find upsetting
- Generalisations may be limited as they focus on the individual rather than the group
- Often uses lab experiments so therefore low ecological validity

**Strengths**

- Useful to know about individual differences
- Often holistic as provides an overall approach to individual differences
- Can be ethical if the questions are not intrusive
- Provides an explanation for individual behaviour
- Often uses self reports which are reliable
- Often uses field experiments/observations so therefore high ecological validity

Any other appropriate point.

No comment on the strengths and weaknesses of individual differences approach.	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 approach and investigation.	3–4
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

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- (d) Compare the individual differences approach with one other approach in psychology using the Billington et al. study and any other study as examples. [10]

Candidates may describe/evaluate approaches with no comparison point. These candidates can achieve up to 4 marks maximum.

Appropriate comments:

Both approaches are useful.

Both approaches are reductionist (or one is reductionist and the other holistic)

Both approaches do studies that can have good ecological validity (or one is good and the other is poor)

Both approaches are deterministic (or one is deterministic and the other shows free will)

Time period when approaches were developed in psychology

Both approaches can have wide and varied samples (or one does and the other doesn't or both do not have good generalisability)

Any other appropriate comment.

**No credit** is given for descriptions of the study that are not used to back up a point and comparisons of the studies without comparing the approaches.

No comment on comparison of approaches.	0
Comment given but muddled and weak.	1–2
Comparison of approaches but not specific to investigation(s) OR Consideration of comparisons of approaches which is simplistic but specific to investigation.	3–4
Consideration of <b>one</b> comparison point that is detailed and specific to the investigation. OR Consideration of <b>one</b> comparison point that is brief but specific to the investigation and one that is not specific to the investigation.	5–6
Consideration of comparison of approaches which is good but brief (2 or more points) and specific to at least one of the investigations. OR Consideration of <b>one</b> comparison issue which is detailed and directly relevant to at least <b>one</b> of the investigations and the other comparison point is more simplistic.	7–8
Consideration of comparison of approaches which is detailed (2 or more points) and directly relevant to the investigation.	9–10

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### Section B

3 (a) Outline what is meant by the ‘developmental approach’ in psychology. [2]

1 mark partial, 2 marks full

The developmental approach is the study of children – 1 mark

The developmental approach is the study of how behaviour changes as we age – 2 marks.

Appropriate responses could also include assumptions of the developmental approach.

Using the studies from the list below, answer the questions which follow:

**Langlois et al. (infant facial preference)**

**Nelson (children’s morals)**

**Freud (little Hans)**

(b) Describe how the data were collected in each of these studies. [9]

Indicative content: Most likely answers (any appropriate answer receives credit):

**Langlois et al:** The experimenter observed the visual fixations of each child and measured looking time as well as direction of infant’s gaze while the child sat on their mother’s lap.

**Nelson:** Children had to indicate after hearing the story whether the boy had been good, bad or just okay. They then indicated via 7 faces how good or bad the boy had been. The faces were labelled from ‘very good’ to ‘very bad’ with a mid-point description of ‘just okay’. The children were asked to retell the story at a later stage and if details were missing the children were asked a specific question such as ‘Why did the boy throw the ball?’ Candidates must include two of the three DVs to get full marks.

**Freud:** Little Hans’ father wrote to Freud. These letters described observations and conversations with Little Hans. Freud interpreted these for his study.

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 from the study. 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 from the study. A clear description that is in sufficient detail.	3
Max mark	9



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**(c) What advantages may psychologists have when they investigate the developmental approach? [9]**

Emphasis on advantage. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.

Indicative content:

Can be ethical as permission is granted from the parents.

Children often do not realise they are in a study so results are more valid as fewer demand characteristics/social desirability. (Only credit if this is well explained. Do not credit demand characteristics on its own)

Useful research

May be easy to find participants as the researcher can just go to a school/nursery

Often uses longitudinal research that shows change over time. (only credit longitudinal with its associated advantages as one point)

Can help to explain the nature/nurture debate which is useful

Explains the causes of behaviour

Often generalisable due to diverse/large samples

Any other appropriate advantage.

<b>Marks per point up to a MAXIMUM of three points.</b>	
No answer or incorrect answer.	0
Brief description of advantage.	1
Description of advantage related to investigating developmental processes OR a weak description of advantage related to investigating developmental processes and applied to a study.	2
Description of advantage related to investigating developmental processes and applied to the study effectively.	3
Max mark	9

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4 (a) Outline what is meant by the term ‘validity’ in psychology. [2]

1 mark partial, 2 marks full

Example answer:

If the results are accurate – 1 mark

Whether the study measures what it intends to measure. – 2 marks

Allow definitions of specific types of validity (e.g. ecological validity, population validity, etc.) even if these are not specifically named.

Using the studies from the list below, answer the questions which follow:

**Haney, Banks and Zimbardo (prison simulation)**

**Veale and Riley (mirror gazing)**

**Loftus and Pickrell (false memories)**

(b) Describe how each of these studies is valid. [9]

(Annotations: ticks)

**Haney, Banks and Zimbardo:** Cameras were hidden so participants forgot about them after a while; prisoners did not realise their conversations were recorded; could not keep up act of being very emotional/aggressive for so many days; participants unaware of real aim of the study.

**Veale and Riley:** Questionnaire done at home rather than with researchers present; all questions about BDD; lots of questions asked so covered a variety of areas of BDD.

**Loftus and Pickrell:** Collected both qualitative and quantitative data; participants unaware of real aim of the study.

Candidates may discuss the ecological validity of the study and this is creditworthy. **Answers have to show how the study is valid not is not.**

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 validity from the study. The description may be very brief or muddled.	1
Description of point about validity 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 validity from the study. A clear description that is in sufficient detail.	3
Max mark	9

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**(c) What problems may psychologists have when they try to make their studies valid? [9]**

Emphasis on problem. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.

Indicative content:

Demand characteristics

Social desirability

Difficult to make studies ecologically valid

May break ethical guidelines in order to be valid (need to explain why this makes the study more valid)

Quantitative data may not give full picture of behaviour/thoughts and feelings

Qualitative data may be difficult to summarise and important information may be left out

Or any other relevant problem.

<b>Marks per point up to a MAXIMUM of three points.</b>	
No answer or incorrect answer.	0
Identification of problem.	1
Description of problem related to validity OR a weak description of a problem related to validity and applied to a study.	2
Description of problem related to validity and applied to the study effectively.	3
Max mark	9