



Cambridge International AS & A Level

PSYCHOLOGY

9990/41

Paper 4 Specialist Options: Application and Research Methods

May/June 2025

1 hour 30 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **five** questions in total:
Answer questions from **two** options.
Section A: answer **four** questions.
Section B: answer **one** question.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [].

This document has **8** pages. Any blank pages are indicated.

Section A

Answer questions from **two** options in this section.

Clinical Psychology

Answer **all** questions if you have studied this option.

- 1 The key study by Chapman and DeLapp (2013) on blood/injection/injury phobia used the subjective unit of discomfort scale (SUDS) to assess the change in the anxiety levels of the patient 'T'.
 - (a) (i) Identify **two** situations included in the SUDS hierarchy used with 'T', other than 'getting a phlebotomy'. [2]
 - (ii) Give the results for **one** situation of the SUDS hierarchy identified in part (a) that show a change in the anxiety levels of 'T'. [2]
 - (b) Suggest **one** reason why the data gathered from 'T' might **not** be valid. [2]
 - (c) Explain **two** strengths of using quantitative data to assess the effectiveness of blood/injection/injury anxiety measures. [4]

- 2 Ellis developed rational emotive behaviour therapy (REBT) for the treatment of mood (affective) disorders.
 - (a) Outline how irrational beliefs are changed by REBT. [2]
 - (b) Suggest how the effectiveness of REBT could be measured using a questionnaire. [2]
 - (c) Explain **two** strengths of using REBT to treat depression. [4]

Consumer Psychology

Answer **all** questions if you have studied this option.

- 3 From the key study by Robson et al. (2011) on consumers' responses to table spacing:
- (a) (i) Participants were asked 'how you would feel about being seated at this table'. One of the questions that the participants then had to rate on the questionnaire was 'I would be overheard by other diners'.

Give **two** other questions that the participants were asked to rate. [2]
 - (ii) Outline the type of rating scale used by participants to answer these questions. [2]
 - (b) Suggest **one** way to collect data about the effect of table spacing in restaurants, other than using an online questionnaire with closed questions. [2]
 - (c) Explain **one** strength and **one** weakness of using rating scales to assess consumers' responses to table spacing. [4]
- 4 (a) Outline what is meant by brand awareness. [2]
- (b) Suggest **one** way in which brand awareness could be measured, other than a rating scale. [2]
- (c) Explain **one** strength and **one** weakness of the measurement you suggested in part (b). [4]

Health Psychology

Answer **all** questions if you have studied this option.

- 5 From the key study on positive psychology in schools by Shoshani and Steinmetz (2014):
- (a) (i) Identify **two** features of the sample used in this study. [2]
 - (ii) Give the **two** reasons why some participants withdrew from the study. [2]
 - (b) The study included a 'wait-list control condition'.

Suggest **one** reason for including this 'wait-list control condition'. [2]
 - (c) Explain **one** strength and **one** weakness of using longitudinal studies to investigate positive psychology in schools. [4]
- 6 (a) Identify **two** behavioural categories included in the UAB pain behaviour scale. [2]
- (b) Suggest **one** way in which acute pain can be managed using a psychological treatment. [2]
- (c) Explain **two** weaknesses of pain measures that use observation to collect data. [4]

Organisational Psychology

Answer **all** questions if you have studied this option.

- 7 From the key study on reasons for sabotage in the workplace by Giacalone and Rosenfeld (1987):
- (a) (i) 'Subjects were told that they should not write their names or any identifying information on the questionnaires.'
- Outline why this was necessary in this study. [2]
- (ii) 'Each subject was also advised that the questionnaires were being used for an industrial psychology seminar and that management would not have access to the responses.'
- Outline why this was necessary in this study. [2]
- (b) The questionnaires used in the study were constructed by an employee who had recently resigned.
- Suggest **one** reason why an employee who had recently resigned was chosen to help construct the questionnaires. [2]
- (c) Explain **two** reasons why generalisations **cannot** be made about sabotage from one study. [4]
- 8 (a) Explain what is meant by an 'error of commission' when investigating accidents at work. [2]
- (b) Suggest **one** way in which an error of commission could be reduced. [2]
- (c) Explain **two** weaknesses when gathering data about accidents at work. [4]

Section B

Answer **one** question from this section.

Clinical Psychology

- 9 (a) Plan a study using a postal questionnaire to investigate attributional styles in adults with depression.

Your plan must include details about:

- type(s) of data
- sampling technique. [10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your study. [4]

- (c) (i) Explain **one** reason for your choice of type(s) of data. [2]

(ii) Explain **one** weakness of the use of a postal questionnaire in your study. [2]

(iii) Explain **one** reason for your choice of sampling technique. [2]

Consumer Psychology

- 10 (a) Plan a study using a field experiment to investigate the effect of food name on menu item choice.

Your plan must include details about:

- type(s) of data
- dependent variable. [10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your experiment. [4]

- (c) (i) Explain **one** reason for your choice of type(s) of data. [2]

(ii) Explain **one** weakness of your choice of type(s) of data. [2]

(iii) Explain **one** reason for your choice of dependent variable. [2]

Health Psychology

- 11 (a) Plan a study using a face-to-face interview to investigate the effectiveness of stimulation therapy/TENS for managing acute pain.

Your plan must include details about

- interview format
- sampling technique.

[10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your study. [4]

(c) (i) Explain **one** reason for your choice of interview format. [2]

(ii) Explain **one** weakness with conducting a face-to-face interview in your study. [2]

(iii) Explain **one** reason for your choice of sampling technique. [2]

Organisational Psychology

- 12 (a) Plan a study using an interview to investigate the effects of rapid rotation shiftwork on the health of workers.

Your plan must include details about:

- question scoring/interpretation
- interview format.

[10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your study. [4]

(c) (i) Explain **one** reason for your choice of question scoring/interpretation. [2]

(ii) Explain **one** weakness of your choice of question scoring/interpretation. [2]

(iii) Explain **one** reason for your choice of interview format. [2]

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