



Cambridge International AS & A Level

PSYCHOLOGY

9990/41

Paper 4 Specialist Options: Application and Research Methods

October/November 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 Grant et al. (2008) treated gambling disorder in one of two double-blind placebo-controlled trials, in a university and treatment centres.
 - (a) (i) Identify the drug used in each trial. [2]
 - (ii) State the duration of each trial. [2]
- (b) Suggest why placebo-controlled trials were used in this study. [2]
- (c) Explain **one** strength and **one** weakness of using multiple locations within this study. [4]

- 2 (a) Outline **one** case study of schizophrenia. [2]
- (b) Suggest why the data gathered from a person with schizophrenia might **not** be reliable. [2]
- (c) Explain **two** strengths of using case studies to collect data on schizophrenia. [4]

Consumer Psychology

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

- 3 From the key study by Becker et al. (2011) on food package design, a pre-test on packaging shape was conducted.
 - (a) Describe the procedure of the pre-test on packaging shape. [4]
 - (b) Suggest **one** effect on the results if the pre-test had **not** been conducted. [2]
 - (c) Explain **one** strength and **one** weakness of conducting studies on packaging shape for food in the entrance hall of a supermarket. [4]

- 4 (a) Explain what is meant by the term 'retail atmospherics'. [2]
- (b) Suggest the effect **one** retail atmospheric might have on shopper ambience. [2]
- (c) Explain **two** strengths of studying retail atmospherics for the seller (retailer). [4]

Health Psychology

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

5 The key study by Bridge et al. (1988) on reducing stress during medical treatment divided the female participants into two experimental groups and one control group.

(a) (i) Outline the procedure followed by the 'relaxation plus imagery' experimental group. [2]

(ii) Outline the experimental design that was used in this study. [2]

(b) Suggest **one** problem if a different experimental design was used in this study, other than the one you outlined in part (a)(ii). [2]

(c) Explain **one** strength and **one** weakness of using a sample of female participants in studies on reducing stress. [4]

6 (a) Outline the methodology used in **one** study on improving adherence in children (e.g. Chaney et al. 2004). [2]

(b) Suggest **one** ethical guideline that applies to the children in the study you outlined in part (a). [2]

(c) Explain **two** weaknesses of using parents/guardians to collect data about improving the adherence of children in their care. Do **not** refer to ethics in your answer. [4]

Organisational Psychology

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

7 From the key study by Cuadrado et al. (2008) on women's access to managerial positions:

(a) (i) State **two** features of the sample of participants used in this study. [2]

(ii) Outline what each participant was asked to do after reading the narrative (the description of the supervisor's behaviour). [2]

(b) Suggest why Cuadrado et al. used four different versions of the same narrative. [2]

(c) Explain **two** strengths of using an experiment to investigate women's access to managerial positions in this study. [4]

8 Walton's quality of working life (QWL) has an evaluation scale with eight conditions, including a fair and appropriate salary.

(a) State **two** question items from the scale that relate to a fair and appropriate salary. [2]

(b) Suggest how the reliability of the QWL evaluation scale could be tested. [2]

(c) Explain **two** weaknesses of the question items from the QWL evaluation scale. [4]

Section B

Answer **one** question from this section.

Clinical Psychology

9 (a) Plan a study using a structured observation to investigate the effectiveness of imaginal desensitisation for treating gambling disorder.

Your plan must include details about:

- naturalistic or controlled observation
- type(s) of data.

[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 naturalistic observation or controlled observation. [2]

(ii) Explain **one** strength of using a structured observation in your study. [2]

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

Consumer Psychology

10 (a) Plan a field experiment to investigate the effect on spending when playing classical music in different types of restaurant.

Your plan must include details about:

- controls
- a directional or non-directional hypothesis.

[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 controls. [2]

(ii) Explain **one** weakness of your choice of controls. [2]

(iii) Explain **one** reason for your choice of directional or non-directional hypothesis. [2]

Health Psychology

11 (a) Plan an experiment to investigate the effectiveness of biofeedback to manage stress in university students.

Your plan must include details about:

- experimental design
- 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 experimental design. [2]

(ii) Explain **one** weakness of your choice of experimental design. [2]

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

Organisational Psychology

12 (a) Plan a study using a questionnaire to investigate levels of job satisfaction following a job enlargement.

Your plan must include details about:

- questionnaire technique
- question 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 questionnaire technique. [2]

(ii) Explain **one** weakness of your choice of questionnaire technique. [2]

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

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