



Cambridge International AS & A Level

PSYCHOLOGY

9990/42

Paper 4 Specialist Options: Application and Research Methods

February/March 2024

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 From the key study by Grant et al. (2008) on treating gambling disorder with drugs and placebo:
 - (a) Explain what is meant by a double-blind, placebo-controlled trial as used in this study. [4]
 - (b) Suggest **one** effect if a double-blind trial had **not** been used in this study. [2]
 - (c) Explain **two** strengths of conducting placebo-controlled trials in studies of gambling disorder. [4]

- 2 Generalised anxiety disorder can be assessed using the GAD-7.
 - (a) Outline how answers are scored on the GAD-7 scale. [2]
 - (b) Suggest how the validity of the GAD-7 could be tested. [2]
 - (c) Explain **one** strength and **one** weakness of the GAD-7 scale. [4]

Consumer Psychology

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

- 3 From the key study by North et al. (2003) on musical style and restaurant customers' spending:
 - (a) (i) Outline **two** variables within the restaurant that were controlled, other than the music CDs. [2]
 - (ii) Describe how counterbalancing was used in this study. [2]
 - (b) Suggest **one** effect if counterbalancing had **not** been used in this study. [2]
 - (c) Explain **two** strengths of controlling the music CDs. [4]

- 4 Menu item choice can be affected by both primacy and recency.
 - (a) Explain what is meant by primacy in relation to menu item choice. [2]
 - (b) Suggest **one** feature of a menu that might affect item choice, other than primacy or recency. [2]
 - (c) Explain **one** strength and **one** weakness of conducting a study on menu item choice in a laboratory. [4]

Health Psychology

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

- 5 From the key study by Yokley and Glenwick (1984) on improving medical adherence using community interventions:
- (a) (i) Describe **one** cause of confounding identified by Yokley and Glenwick. [2]
 - (ii) Explain what was done in the study by Yokley and Glenwick to prevent confounding. [2]
 - (b) Suggest **one** strategy for promoting health that could be used to improve medical adherence, other than the strategy used by Yokley and Glenwick. [2]
 - (c) Explain **two** strengths of conducting field experiments to study participation in immunisation interventions in communities. [4]
- 6
- (a) Explain what is meant by 'mirror treatment' for phantom limb pain. [2]
 - (b) Suggest **one** biological/biochemical way in which phantom limb pain can be treated. [2]
 - (c) Explain **two** strengths of mirror treatment for phantom limb pain. [4]

Organisational Psychology

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

- 7 From the key study by Claypoole and Szalma (2019) on electronic performance monitoring:
- (a) Describe how the **two** forms of electronic presence were used in this study. [4]
 - (b) Suggest **one** way in which worker performance could be monitored, other than electronic presence. [2]
 - (c) Explain **one** strength and **one** weakness of conducting a study on electronic performance monitoring, using students as participants. [4]
- 8
- (a) Describe how data was collected in **one** study about the impact of the design of the work environment on people who work in open plan offices (e.g. Oldham and Brass, 1979). [2]
 - (b) Suggest how **one** job characteristic might be affected by a move to a different type of office. [2]
 - (c) Explain **one** strength and **one** weakness of the way that data was collected in the study you described in part (a). [4]

Section B

Answer **one** question from this section.

Clinical Psychology

- 9 (a) Plan a covert observation to investigate the effectiveness of covert sensitisation for treating kleptomania.

Your plan must include details about:

- structured observation or unstructured observation
- steps for making the study reliable. [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 structured observation or unstructured observation. [2]

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

(iii) Explain **one** reason for your choice of steps for making the study reliable. [2]

Consumer Psychology

- 10 Wayfinding is affected by factors such as signs and 'you are here' maps.

- (a) Plan a study using a questionnaire to investigate whether the use of signs is more effective than 'you are here' maps when wayfinding in a shopping mall.

Your plan must include details about:

- sampling 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 sampling technique. [2]

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

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

Health Psychology

- 11 (a) Plan a field experiment to investigate which psychological treatment is the **most** effective for managing pain.

Your plan must include details about:

- experimental design
- 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 experimental design. [2]

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

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

Organisational Psychology

- 12 Within each 24-hour period, workers in different offices have different work patterns: workers in Office A work 8 hours (9 am–5 pm); workers in Office B work 8 hours flexitime.

- (a) Plan a study using an interview to investigate which work pattern gives workers more job satisfaction.

Your plan must include details about:

- interview technique
- question scoring/interpretation. [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 technique. [2]

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

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

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