



Cambridge International AS & A Level

PSYCHOLOGY

9990/42

Paper 4 Specialist Options: Application and Research Methods

October/November 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 The key study by Chapman and DeLapp (2013) treated an individual with a blood/injection/injury phobia using an exposure hierarchy with applied tension:
 - (a) (i) Explain what is meant by the term 'exposure hierarchy'. [2]
 - (ii) Give **two** examples of situations included in the exposure hierarchy in this study. [2]
- (b) Suggest how blood/injection/injury phobia could be diagnosed without using rating scales. Your suggestion **must** be ethical. [2]
- (c) Explain **one** strength and **one** weakness of the case study research method as used in this study. [4]

- 2 Depression can be measured using the Beck depression inventory (BDI).
 - (a) Outline how a person's level of depression is interpreted using the BDI. [2]
 - (b) Suggest **one** way that depression could be measured, other than by the BDI. [2]
 - (c) Explain **two** weaknesses of the BDI. [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) Describe the **two** parts of the online questionnaire used in this study. [4]
 - (b) Suggest how an observation could be used to gather data on consumers' responses to table spacing. [2]
 - (c) Explain **two** weaknesses of using online questionnaires to assess personal space in restaurants. [4]

- 4 EEG (electroencephalogram) as a technique has been used to investigate how people respond to advertising media, e.g. Ciceri et al. (2020).
 - (a) Outline how an EEG can be used to investigate how people respond to advertising media. [2]
 - (b) Suggest **one** way to investigate how people respond to advertising media, other than by using an EEG. [2]
 - (c) Explain **one** strength and **one** weakness of studying how people respond to advertising media using an EEG. [4]

Health Psychology

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

5 The key study by Shoshani and Steinmetz (2014) on using positive psychology in schools used questionnaires to gather data. These included the Rosenberg Self-Esteem Scale (RSE) and the General Self-Efficacy Scale, both of which used four-point scales.

(a) (i) Outline the Rosenberg Self-Esteem Scale (RSE). [2]

(ii) Outline the General Self-Efficacy Scale. [2]

(b) Suggest **one** health promotion strategy that could be used to promote mental health in schools, other than the strategy referred to in this study. [2]

(c) Explain **one** strength and **one** weakness of using four-point scales in this study. [4]

6 (a) Explain what is meant by a clinical interview.
Do **not** refer to observing patients' behaviour in your answer. [2]

(b) Suggest how observing the pain behaviour of a patient can help assess their level of pain during a clinical interview. [2]

(c) Explain **two** weaknesses of using a clinical interview to measure pain. [4]

Organisational Psychology

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

7 The key study by Giacalone and Rosenfeld (1987) on sabotage in the workplace divided workers into two groups:

(a) (i) Explain how the sample of participants were divided into these two groups. [2]

(ii) State **one** difference between the results of the Sabotage Methods Questionnaire for these two groups of participants. [2]

(b) Suggest **one** way that the reliability of the Sabotage Methods Questionnaire could be tested. [2]

(c) Explain **two** weaknesses of using a volunteer sample of workers to answer questionnaires about sabotage. [4]

8 Studies have been conducted on open plan offices, e.g. Oldham and Brass (1979).

(a) Explain what is meant by an 'open plan office'. [2]

(b) Suggest why workers' levels of concentration may be affected by an open plan office design. [2]

(c) Explain **two** reasons why generalisations **cannot** be made about the effect on workers of open plan office design from a single study. [4]

Section B

Answer **one** question from this section.

Clinical Psychology

9 (a) Plan a study using a questionnaire with open questions to investigate generalised anxiety disorder in university students.

Your plan must include details about:

- question interpretation/scoring
- the questionnaire 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 the way you chose to interpret/score responses to your questions. [2]

(ii) Explain **one** weakness of the way you chose to interpret/score responses to your questions. [2]

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

Consumer Psychology

10 (a) Plan a study using a postal questionnaire to investigate the 'explorer' type of spatial behaviour pattern of shoppers.

Your plan must include details about:

- sampling technique
- 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 sampling technique. [2]

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

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

Health Psychology

11 Some children participated in a healthy eating programme when at school to encourage them to eat more vegetables.

(a) Plan a study using a telephone interview of these children, once they are adults, to investigate whether their participation in this healthy eating programme resulted in eating more vegetables as adults.

Your plan must include details about:

- question format
- 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 format.

[2]

(ii) Explain **one** weakness of your choice of question format.

[2]

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

[2]

Organisational Psychology

12 Shiftwork can be divided into two types: slow rotation and rapid rotation.

(a) Plan an experiment to investigate which type of rotation has the **most** negative effect on the health of workers.

Your plan must include details about:

- controls
- 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 controls.

[2]

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

[2]

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

[2]

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