



Oxford Cambridge and RSA

Monday 13 May 2024 – Afternoon

AS Level Psychology

H167/01 Research methods

Time allowed: 1 hour 30 minutes



You must have:

- a ruler (cm/mm)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

INFORMATION

- The total mark for this paper is **75**.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document has **20** pages.

ADVICE

- Read each question carefully before you start your answer.

Section A

Multiple Choice

For each question write the letter in the box.

1 When writing up a practical report, which of these best describes what an abstract is?

- A a link to related existing research
- B a summary of the research
- C an evaluation of the research
- D an extension of the research

Your answer

[1]

2 Which sampling technique starts with one person, who is asked to suggest another person to take part, and then that person asks someone else, and so on?

- A opportunity sampling
- B random sampling
- C self-selected sampling
- D snowball sampling

Your answer

[1]

3 What is criterion validity?

- A whether the measurement of a variable can be applied to the target population
- B whether the measurement of a variable can be replicated
- C whether the measurement of a variable can predict outcomes for similar behaviour in the future
- D whether the measurement of a variable relates to everyday life

Your answer

[1]

- 4 The table below shows the findings from a sample of 50 people asked about their favourite colour. What percentage of people said their favourite colour was blue?

Colour	Number of people who said this was their favourite colour
Red	17
Blue	11
Green	9
Yellow	7
Pink	6

- A 2.2%
- B 5%
- C 11%
- D 22%

Your answer

[1]

- 5 In an experiment, which type of hypothesis predicts there will be 'no difference' between the conditions?

- A alternative hypothesis
- B null hypothesis
- C one-tailed alternative hypothesis
- D two-tailed alternative hypothesis

Your answer

[1]

6 Which type of statistical analysis requires data to come from conditions with similar variances?

- A descriptive statistical tests
- B measures of dispersion statistical tests
- C non-parametric statistical tests
- D parametric statistical tests

Your answer

[1]

7 Which of these always has an independent variable?

- A field experiments
- B laboratory experiments
- C quasi experiments
- D all of the above

Your answer

[1]

8 Which of these is **not** a type of reliability?

- A inter-rater
- B peer-review
- C split-half
- D test-retest

Your answer

[1]

9 Which term refers to when participants change their behaviour to present themselves in a more favourable way?

- A social acceptance
- B social desirability
- C social inclusion
- D social referencing

Your answer

☐

[1]

10 Which of these is **not** a term used when describing the outcome of a correlation statistical analysis?

- A negative
- B positive
- C skew
- D zero

Your answer

☐

[1]

11 How were participants recruited for Chaney et al.'s (2004) Funhaler study?

- A through local child or general practitioner clinics
- B through local newspapers
- C through local schools
- D through local sports clubs

Your answer

☐

[1]

12 In Bandura et al.'s (1961) study into the transmission of aggression in children, how was time sampling used to observe the children during phase 3 of the experiment (test for delayed imitation)?

- A** continuously for 20 minutes
- B** every 5 seconds for 20 minutes
- C** every minute for 20 minutes
- D** randomly throughout a period of 20 minutes

Your answer

[1]

13 In Freud's (1909) study of Little Hans the data was obtained through information contained in letters written by Hans' father. Which type of data is this?

- A** binary
- B** nominal
- C** primary
- D** secondary

Your answer

[1]

14 What is 28.6359 written to two significant figures?

- A** 28
- B** 28.64
- C** 28.7
- D** 29

Your answer

[1]

15 If a psychologist plans to conduct a study which makes it easy for participants to stop taking part at any stage if they want to, which ethical consideration is being addressed?

- A** consent
- B** debrief
- C** deception
- D** right to withdraw

Your answer

[1]

Section B

Research design and response

Count your blessings

As many as 1 in 4 people experience mental health issues at some time in their life and psychologists are always looking for new ways to help people cope with such matters. One interesting idea is that by writing down things that we should be grateful for (such as having good friends, a nice sunny day and our physical well-being) we can help improve our mental health. Psychologists want to investigate this further by using the self-report method, asking people about what kind of things they feel grateful for and how this makes them feel.

16

(a) Identify **one** reason why the study might have low population validity.

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 [1]

(b) Write a one-tailed alternative hypothesis for this study.

.....

 [3]

17* Explain how you would use the self-report method to investigate what kind of things make people feel grateful and if this helps improve their mental health. Justify your decisions as part of your explanation. You must refer to:

- the use of a structured interview
- one question that uses a Likert scale
- the sampling method you would use to collect participants.

You should use your own experience of practical activities to inform your response. [12]

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18 Suggest **one** open question that you could use in this study.

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..... [2]

19

(a) Outline **one** strength of the use of open questions in this study.

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..... [3]

(b) Outline **one** weakness of the use of open questions in this study.

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..... [3]

20 Outline how you would address **two** ethical considerations in the design of this study.

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[6]

21 Outline **one** strength of using an interview rather than a written questionnaire in this study.

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[3]

22 Suggest **two** variables that could be correlated in this study to investigate the relationship between feeling grateful and mental health/well-being.

Variable 1

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Variable 2

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[2]

Section C

Data analysis and interpretation

The eyes have it

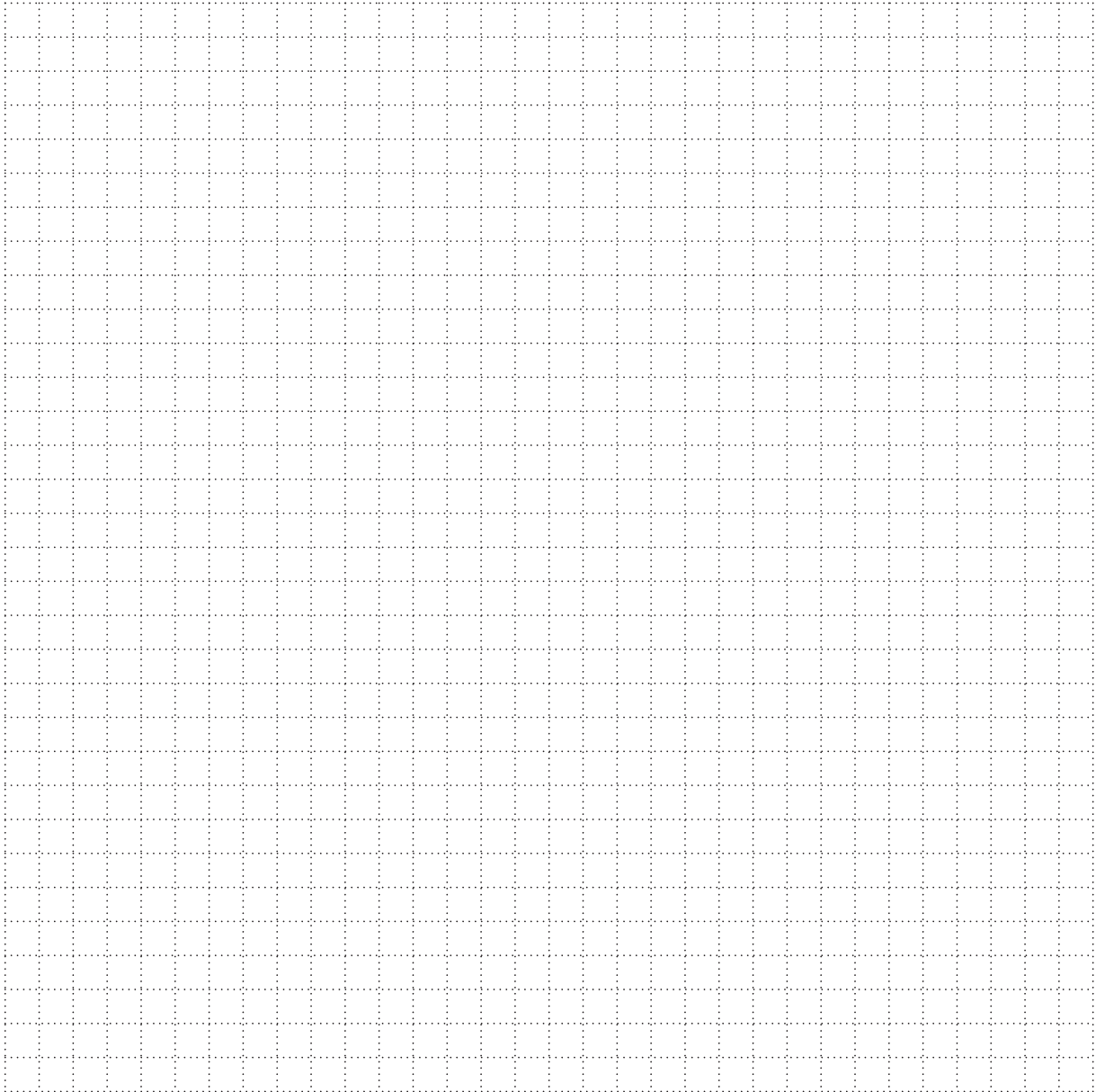
Most people agree that puppy dogs are cute, but why is this?

A psychologist investigated the possibility that the eyes play a big part. They conducted a repeated measures design experiment using a photo of the same puppy but with the eyes made to look different sizes (big or small). First participants were shown the photo with the big eyes, then a week later the same participants were shown the photo with the small eyes. On each occasion participants were asked to rate how cute the puppy was on a scale of 1 ('not very cute') to 20 ('extremely cute').

The data collected is shown in the table below.

Ratings of how cute a puppy is (1 = 'not very cute', 20 = 'extremely cute')		
Participant	Condition (a) with big eyes	Condition (b) with small eyes
a	18	7
b	14	3
c	12	14
d	17	20
e	19	9
f	16	10

- 23 Draw a fully labelled bar chart displaying the mean rating for how cute the puppy was perceived to be in each condition of this study.



[4]

24 Outline **two** conclusions that can be made from the data collected in this study.

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[6]

25 Outline **one** strength and **one** weakness of the use of quantitative data in this study.

Strength

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Weakness

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[6]

26

- (a) The inferential statistical test used to analyse the data collected in this study is the Wilcoxon Signed Ranks test. Explain how data is ranked for this test in this study.

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..... [3]

- (b) Using the Wilcoxon Signed Ranks test, calculate the value of T for the data collected in this study by completing the table below. [3]

Formula/process:

T = the sum of the ranks of the differences with the least frequent sign

Ratings of how cute a puppy is (1 = 'not very cute', 20 = 'extremely cute')					
Participant	Condition (a) with big eyes	Condition (b) with small eyes	Difference (a) – (b)	Ranks of differences	T value (sum of the ranks of the differences with the least frequent sign)
a	18	7			
b	14	3			
c	12	14			
d	17	20			
e	19	9			
f	16	10			

27 Outline **one** reason why the reliability of the data collected in this study could be low.

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..... [3]

END OF QUESTION PAPER

This image shows a blank sheet of white paper designed for writing. It features a series of evenly spaced horizontal blue lines across its entire width. A single vertical red line runs down the left side, creating a narrow margin. The paper is otherwise completely empty, with no text or markings.

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