



Oxford Cambridge and RSA

**Friday 19 November 2021 – Afternoon**

**GCSE (9–1) Psychology**

**J203/02 Studies and applications in psychology 2**

**Time allowed: 1 hour 30 minutes**

8989717423\*

**You must have:**

- 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)

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Last name

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**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 **90**.
- 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**

**Memory**

Answer **all** questions in this section.

1 (a) Identify how information is encoded in long-term memory.

- A Mainly auditory
- B Mainly elaborative
- C Mainly semantic
- D Mainly visual

Your answer

[1]

(b) Identify how long information can remain in short-term memory, according to the Multi-store Model of memory.

- A Up to 15 seconds
- B Up to 20 seconds
- C Up to 30 seconds
- D Up to 40 seconds

Your answer

[1]

(c) Identify **one** criticism of the Multi-store Model of memory.

- A The model does not consider rehearsal
- B The model does not consider that information can decay
- C The model does not explain why we can recall things we have not rehearsed
- D The model does not provide evidence for the distinction between short-term and long-term memory

Your answer

[1]

2 Ling investigated whether digit span increased with age. Ling conducted a laboratory experiment whereby they read aloud number sequences to children of different ages and recorded how many they could recall in the correct order. Ling's results are shown below.

| Age of child    | Digit span |
|-----------------|------------|
| Five-year-olds  | 4          |
| Six-year-olds   | 5          |
| Seven-year-olds | 5          |
| Eight-year-olds | 6          |
| Nine-year-olds  | 6          |
| Ten-year-olds   | 7          |

Using the source:

(a) State what would have happened, according to the Multi-store Model of memory, if the children had not paid attention to Ling reading the number sequences.

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[1]

(b) State the capacity of short-term memory according to the Multi-store Model of memory.

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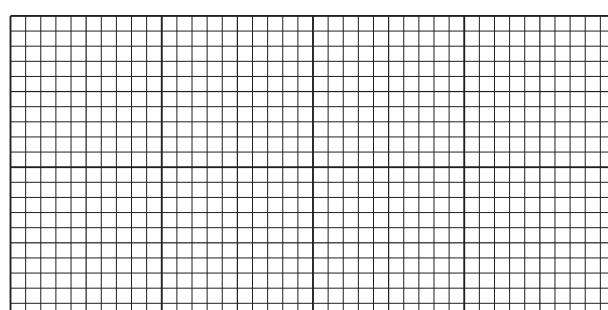
[1]

(c) Calculate the median digit span between the children tested in the source. Show your workings.

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[2]

(d) Draw a histogram to display the results of the digit span experiment.



[3]

(e) Describe **one** ethical issue Ling should have considered before conducting the digit span experiment.

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[2]

3 Wilson, Kopelman and Kapur (2008) used the case study method to investigate prominent and persistent loss of past awareness in amnesia.

(a) Explain **one** strength of the case study method as used in Wilson et al.'s (2008) study.

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[2]

(b) Explain **one** weakness of the case study method as used in Wilson et al.'s (2008) study.

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[2]

4 Outline the role of the hippocampus in anterograde amnesia.

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[2]

5 A soft drinks company wants to advertise its new brand of fizzy drink. To encourage sales, they employ a psychologist to help them advertise the new fizzy drink.

Describe techniques the company could use to influence recall of the fizzy drink and how people remember the advertisements.

[6]

**Section B**

**Social Influence**

Answer **all** questions in this section.

**6 (a)** Identify the sample in the NatCen (2011) study into the August riots in England.

- A** 26 under- and over-eighteen-year-olds
- B** 26 under-eighteen-year-olds
- C** 36 over-eighteen-year-olds
- D** 36 under- and over-eighteen-year-olds

Your answer

[1]

**(b)** Identify which of the following is a sub-group of Rioters as described in the NatCen (2011) study.

- A** Opportunists
- B** The curious
- C** Thrill-seekers
- D** Wannabes

Your answer

[1]

**(c)** Identify which of the following represents a possible tug factor in the NatCen (2011) study.

- A** Easy to get involved
- B** No means to pay for goods
- C** Poor job prospects
- D** Relatives not approving

Your answer

[1]

7 Li and Taylor are taking part in a peaceful protest to promote animal rights. As vegetarians, they want to help change the future of animals. During the protest, some individuals in the crowd become abusive. Taylor sits down and decides not to join the crowd in their abusive behaviour. Li, however, carries on with the protest and joins in with the abusive behaviour.

Using the source:

(a) Name the person who has an external locus of control.

..... [1]

(b) Outline how locus of control may affect **either** Li's or Taylor's decision to join in with the abusive behaviour.

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 ..... [3]

(c) State **one** situational factor that may affect Li's decision to carry on with the protest and join in with the abusive behaviour.

..... [1]

8 Dispositional factors have been shown to affect anti-social behaviour.

(a) Explain how morality can affect anti-social behaviour.

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 .....  
 .....  
 .....  
 ..... [2]

(b) Outline how brain differences may affect anti-social behaviour.

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 ..... [2]

9 Describe **two** criticisms of dispositional explanations of obedience.

1

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2

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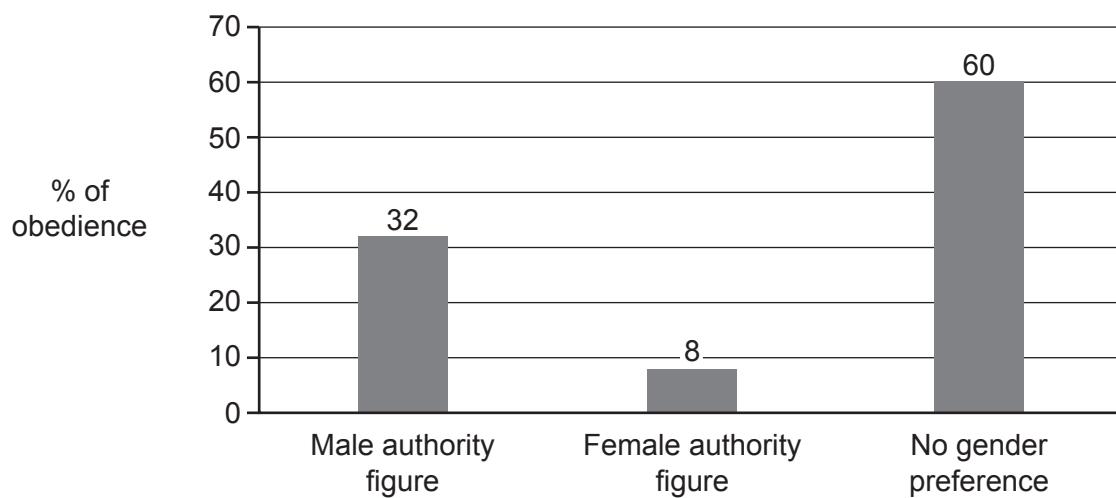
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[4]

10 Sam wanted to investigate whether gender affects an individual's authority. Sam asked participants to state whether they would be more likely to obey a male or a female or whether the individual's gender made no difference to whether they would obey. Sam's results are shown below.

The percentage of participants stating they would obey



Using the source:

(a) Calculate the ratio of participants who stated they would obey a male authority figure compared to those stating they would obey a female authority figure. Write the ratio in its simplest form. Show your workings.

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[2]

(b) Explain how social desirability may have affected the results of the study in the source.

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[2]

11 Describe how majority influence could be used to promote social change in relation to mental health stigma.

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[4]

10

Section C

**Sleep and Dreaming**

Answer **all** questions in this section.

12 (a) Identify the method used by Williams et al. (1992) in their study into weirdness in dreams and fantasies.

- A Field experiment and observation
- B Field experiment and self-report
- C Natural experiment and observation
- D Natural experiment and self-report

Your answer

[1]

(b) Identify which of the following describes the sample in Williams et al.'s (1992) study.

- A Ten male and two female American students
- B Ten male and two female Australian students
- C Two male and ten female American students
- D Two male and ten female Australian students

Your answer

[1]

(c) Identify which of the following statements is true in relation to Williams et al.'s (1992) study.

- A An equal number of dreams and fantasies were analysed
- B More dreams than fantasies were analysed
- C Only dreams were analysed
- D Only fantasies were analysed

Your answer

[1]

13 Ali cannot get to sleep. Their doctor says that Ali needs to make their bedroom darker as exposure to light tells our brain that we should be alert. The doctor prescribes sleeping tablets to help regulate Ali's sleep hormones.

Using the source:

(a) Name the type of insomnia Ali is suffering from.

..... [1]

(b) State the hormone Ali's doctor is trying to regulate using sleeping tablets.

..... [1]

(c) Explain the role of light as an exogenous zeitgeber in Ali's sleep cycle.

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..... [3]

14 Complete the following passage about the Freudian Theory of Dreaming.

You must choose a different term for each gap from the list below.

**latent content      manifest content      repression      unconscious mind      wish fulfilment**

Freud believed the ..... contained desires, urges, and thoughts that are unacceptable to the conscious mind. According to Freud, the actual content of dreams including the images, thoughts and content contained in the dream is related to the ..... Freud believed that this served to disguise the ..... or the unconscious wishes of the dreamer. [3]

**15\*** Use your knowledge and understanding from across the psychology course to explain how far you agree with the following statement:

“As human behaviour is complex, it needs to be broken down into smaller parts to be understood. This is known as reductionism.”

In your answer, you should refer to biological theories of sleep and dreaming **and at least one** other theory from a different area of psychology you have studied. [13]



## Section D

## Research Methods

Answer **all** questions in this section.

A psychologist wanted to investigate how useful digital technology is to support students' learning. They asked a colleague if they could attend one of their lessons and whilst pretending to be another teacher, observed how the students used their tablets and mobile phones in the lesson. The psychologist was trying to find out if male and female students were distracted by technology by using social media or texting, or if they used the technology to support their learning.

As the psychologist co-taught the lesson, they observed the students' use of digital technology by recording each time the students used digital technology and what purpose they used it for.

The results are shown in the table below.

| Use of digital technology for:          | Males | Females |
|---|-------|---------|
| Learning purposes                       | 12    | 29      |
| As a distraction – social media/texting | 9     | 13      |

After the observation had finished, the psychologist interviewed one male and one female student and asked them questions about their use of digital technology for learning.

**16 (a)** Identify the type of observation the psychologist used in the source.

Tick **one** box to show your answer.

Covert non-participant observation

Covert participant observation

Overt non-participant observation

Overt participant observation

[1]

**(b)** Outline **one** strength of the type of observation the psychologist used in the source.

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[2]

15

17 (a) The psychologist used opportunity sampling in their study.

Explain how they could have used self-selected sampling for this study instead.

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[2]

(b) The sample used in a study can often affect how generalisable results are.

Explain **one** way the sample used in this study may affect the generalisability of the findings.

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[2]

18 The psychologist used the observational method in their study. They could have used a questionnaire instead.

Explain why using an observation could have given the study high construct validity.

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[2]

19 The psychologist collected both quantitative and qualitative data.

State how they collected quantitative data.

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[1]

20 (a) The psychologist analysed the results to look for sex differences and use of digital technology. They calculated that 57% of males used digital technology for learning purposes.

Calculate the percentage, to **two** significant figures, of females who used digital technology for learning purposes. Show your workings.

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[3]

(b) State **one** conclusion the psychologist made in relation to sex differences and the use of digital technology to support students' learning. Refer to the results table in the source to support your answer.

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[2]

21 Identify which of the following alternative hypotheses the psychologist will accept.

Tick **one** box to show your answer.

Digital technology such as tablets and mobile phones will be used by participants more as a distraction than used to support their learning.

Digital technology such as tablets and mobile phones will be used more by participants to support their learning rather than as a distraction.

There will be no difference in how digital technology such as tablets and mobile phones will be used by participants.

[1]

22 Observations are sometimes affected by observer bias and the observer effect. Explain how observer bias and observer effect are different.

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..... [2]

**END OF QUESTION PAPER**

**ADDITIONAL ANSWER SPACE**

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).





This image shows a blank sheet of handwriting practice paper. It features a vertical red line on the left side, likely representing a margin. To the right of this margin, there are 22 horizontal grey lines spaced evenly down the page, intended for practicing letter formation and alignment.

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# OCR

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