

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GCSE

B543/01

PSYCHOLOGY

Research in Psychology

TUESDAY 11 JUNE 2013: Afternoon

DURATION: 1 hour
plus your additional time allowance

MODIFIED ENLARGED

Candidate forename		Candidate surname	
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Centre number						Candidate number				
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Candidates answer on the Question Paper.

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

- **Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**
- **Use black ink. HB pencil may be used for graphs and diagrams only.**
- **Answer ALL the questions.**
- **Read each question carefully. Make sure you know what you have to do before starting your answer.**
- **Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.**
-

INFORMATION FOR CANDIDATES

- **The number of marks is given in brackets [] at the end of each question or part question.**
- **The total number of marks for this paper is 40.**
- **Any blank pages are indicated.**

BLANK PAGE

Answer ALL questions.

SECTION A – PLANNING, DOING AND ANALYSING RESEARCH

SOURCE

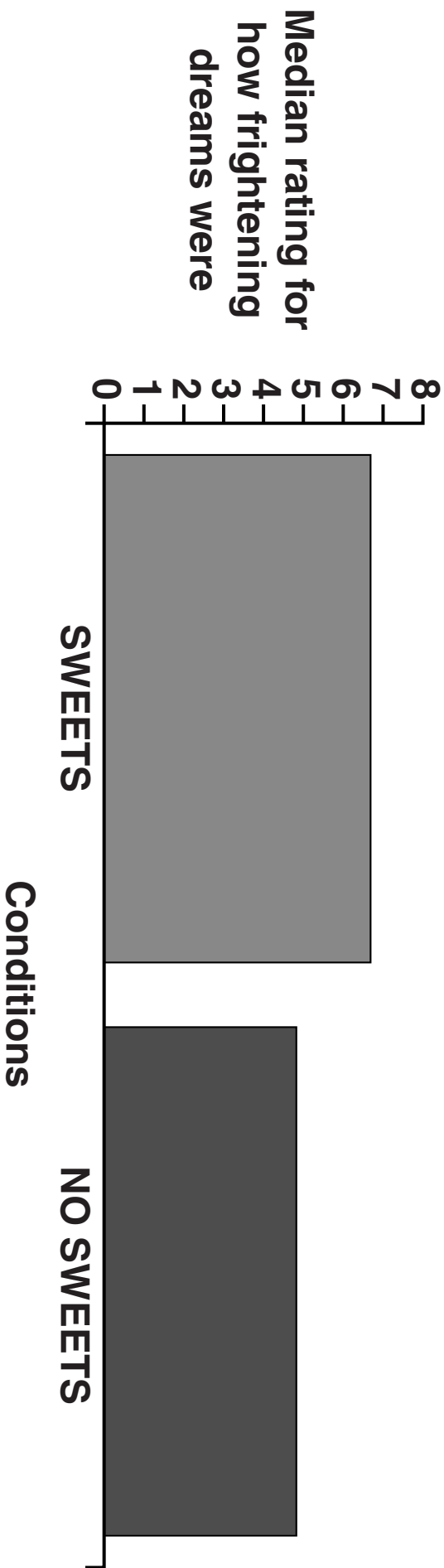
A psychologist carried out a laboratory experiment to test the effects on children of eating sweets close to their bedtime. Her participants were a group of 7 to 11 year olds.

On the first night, the participants were each given an identical packet of sweets to eat one hour before going to sleep in the laboratory. They all went to bed at the same time in the same room. The next morning, each participant was interviewed separately and asked to talk about any dreams they had experienced. The psychologist rated the dreams on a scale of 1 to 10, with 1 being ‘not frightening’ and 10 being ‘very frightening’.

The next night, the same participants were used. This time, they were not allowed any sweets before bedtime. All of the routines stayed the same as the night before. Once again, they were interviewed the next morning and their dreams were rated by the psychologist.

The psychologist concluded that eating sweets close to their bedtime results in children having more frightening dreams.

MEDIAN RATINGS FOR HOW FRIGHTENING DREAMS WERE WHEN PARTICIPANTS HAD SWEETS OR DID NOT HAVE SWEETS



- 1 From the list below, identify the ‘null hypothesis’ for the study in the Source. [1]**

Show your answer by ticking ONE box.

There will be no significant difference in how frightening dreams are whether participants have had sweets immediately before going to sleep or not.

☐

There will be a significant difference in how frightening dreams are depending on whether participants have had sweets immediately before going to sleep or not.

☐

There will be a significant correlation between number of sweets eaten and how frightening dreams are.

☐

- 2 The study had an independent variable and a dependent variable.**

Draw a line to match each variable with the correct example from the study.

[2]

VARIABLE

EXAMPLE FROM STUDY

**independent
variable**

**Whether participants were
given sweets immediately
before bedtime or not.**

**dependent
variable**

**Whether participants were
7 or 11 years old.**

**How frightening participants'
dreams were.**

- 3 Identify the sample in the study in the source.**

_____ **[1]**

- 4 The psychologist made sure that her participants went to bed at the same time both nights.

Explain why it was important to have this control.

[2]

- 5 Identify whether the following statements about experiments are true or false.

Give your answer by circling either TRUE or FALSE as shown below. [2]

TRUE

FALSE

TRUE

FALSE

Experiments can only be carried out in a laboratory.

TRUE

FALSE

Experiments allow researchers to establish cause and effect.

TRUE

FALSE

6 The psychologist used the same participants in both conditions.

(a) Name the experimental design that she used.

_____ [1]

(b) Outline ONE strength of using the same participants in both conditions in this study.

_____ [2]

7 Outline ONE ethical issue associated with the study in the Source.

_____ [2]

- 8 The psychologist used children to avoid demand characteristics.**

Outline how demand characteristics can affect a study.

[2]

- 9 Experiments can lack ecological validity.**

(a) State what is meant by ecological validity.

[1]

(b) Give ONE reason why the study in the source may have lacked ecological validity.

[1]

- 10 Using the bar chart in the Source, give the median rating for how frightening dreams were after participants had sweets.**

[1]

11 Outline ONE weakness of using interviews to find out about how frightening the participants' dreams were.

[2]

12 One of the psychologist's colleagues said she should have measured brain activity as well as interviewing participants about their dreams. He suggested this would have made the results more reliable.

(a) State what is meant by reliability.

[1]

(b) Give ONE reason why measuring brain activity as well as doing interviews would have made the results more reliable.

[1]

13 In a follow-up study, the psychologist wanted to observe some of the participants to see how they behaved when they were given sweets during the daytime.

(a) Identify ONE type of observation she could use to study the participants.

_____ **[1]**

(b) Explain why she should use that type of observation.

_____ **[2]**

SECTION B – PLANNING AN INVESTIGATION

You have been asked to carry out a ‘QUESTIONNAIRE’ to investigate whether people who have had serious accidents are more aware of health and safety issues. The theory is that having a serious accident makes people more careful.

You may use this space to plan your investigation.

14 (a) State a hypothesis for your investigation.

[2]

(b) (i) Name the sampling method that you would use in your investigation.

[1]

(ii) State how you would use this sampling method in your investigation.

[1]

(iii) Give ONE strength of using this sampling method.

[1]

(c) Write TWO questions you would use in your questionnaire to test how careful your participants are.

1 _____

_____ **[1]**

2 _____

_____ **[1]**

(d) Briefly outline how you would carry out your questionnaire to investigate whether people who have had serious accidents are more aware of health and safety issues.

[3]

(e) (i) Identify ONE ethical issue which applies to your investigation.

_____ [1]

(ii) Outline how you would deal with this ethical issue in your investigation.

_____ [2]

(f) Describe ONE strength of using a questionnaire for your investigation.

_____ [2]

END OF QUESTION PAPER

ADDITIONAL PAGE

If you use this lined page to complete the answer to any question, the question number(s) must be clearly shown.

[illegible]

ADDITIONAL PAGE

If you use this lined page to complete the answer to any question, the question number(s) must be clearly shown.

[illegible]

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