



AS PSYCHOLOGY

COMPONENT 2

Psychology: Investigating Behaviour

SPECIMEN PAPER

1 hour 45 minutes



ADDITIONAL MATERIALS

In addition to this examination paper, you will need a 12 page answer book and 2 pieces of graph paper.

INSTRUCTIONS TO CANDIDATES

Answer **all** the questions.

Write your answers in the separate answer book provided.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the need for good English and orderly, clear presentation in your answers.

No certificate will be awarded to a candidate detected in any unfair practice during the examination.

Section A

Answer **all** questions.

1. Define what is meant by 'social desirability' in psychological research. [2]
2. Describe the main features of a quasi-experiment. [4]
3. Identify what is being described in the following statements:
 - (a) The process by which psychological research is assessed to ensure that it is of sufficient quality, usually conducted prior to publication. [1]
 - (b) An experimental design where participants are randomly allocated to either the experimental or control condition. [1]
 - (c) The most basic level of measurement. [1]
 - (d) Sampling technique where every member of the target population has an equal chance of being selected for the sample. [1]
4. Explain the difference between the 0.02 and 0.05 levels of significance. [2]
5. Describe the procedures in Milgram's (1963) *Behavioural study of Obedience*. [8]
6. Developmental psychologists often need to work with children. With reference to Kohlberg's (1968) *The child as a moral philosopher*, comment on the issues that this raises. [6]

Questions continue on the next page

Section B

Answer **all** questions.

7. A psychologist was interested in whether drinking water during the school day would have an effect on children's cognitive performance. He was given permission by the head teacher of a local high school to carry out his investigation on 100 of the 15 year olds studying Mathematics GCSE. The students were put into matched pairs based on their gender and their performance on a previous maths test. One from each pair was put into condition A; Condition A were each given a litre of bottled water to drink through the school day. The other person from the matched pair was assigned to condition B; Condition B received no bottle of water. During the last lesson of the day, all of the students were given the same maths test (maximum marks of 50) to determine how much they had learnt during that day's maths lesson. The results are shown in Table 1 below:

Table 1: Summary table of scores in the maths test of students given water and not given water.

Score in the maths test (/ 50)	Number of students	
	Condition A (water given)	Condition B (no water given)
0 - 10	0	2
11 - 20	6	13
21 - 30	23	15
31 - 40	14	17
41 - 50	7	3
Total number	50	50

- (a) Identify the independent variable in this research. [1]
- (b) Identify the dependent variable in this research. [1]
- (c) Outline **one** form of qualitative data that could be collected in this research. [2]
- (d) Describe **two** issues of validity in this research. [4]
- (e) Identify the level of measurement of the 'maths test scores' and explain your answer. [3]
- (f) Identify an appropriate inferential statistical test that could be used to analyse the data in this research and justify your choice. [3]

Questions continue on the next page

- (g) The researcher used an opportunity sample of students in a local high school. Describe **one** advantage and **one** disadvantage of using an opportunity sample in this research. [4]
- (h) Identify an alternative sampling technique that could have been used in this research and explain how it could have been used by the psychologist when conducting this research. [3]
8. A psychologist conducted a questionnaire amongst first time mothers to investigate their experiences against their expectations. The psychologist advertised for first time mothers using posters displayed at 4 different hospitals around the UK. An extract from the advert can be seen below:

Are you a first time mum?

Would you be willing to take part in research about the experiences and expectations of first time mothers?

The research would require you completing two questionnaires; one questionnaire when you are 6 months pregnant and another questionnaire when your baby is 6 months old.

Your results will remain confidential. If you decide to participate you can still withdraw from the research at any time.

If you would like more information or would like to take part in the research, please contact

A.Researcher@eduqas.ac.uk

The psychologist used the first 10 women to respond to her advert. She emailed the first questionnaire when the women were 6 months pregnant and then emailed the second questionnaire when the babies were 6 months old.

One of the questions included in both questionnaires was 'How satisfied are you with your life at present?' The women responded to this question on the scale shown below:

0	1	2	3
Not satisfied	Slightly satisfied	Mostly satisfied	Completely satisfied

The results are shown in *Table 2* on next page.

Questions continue on the next page

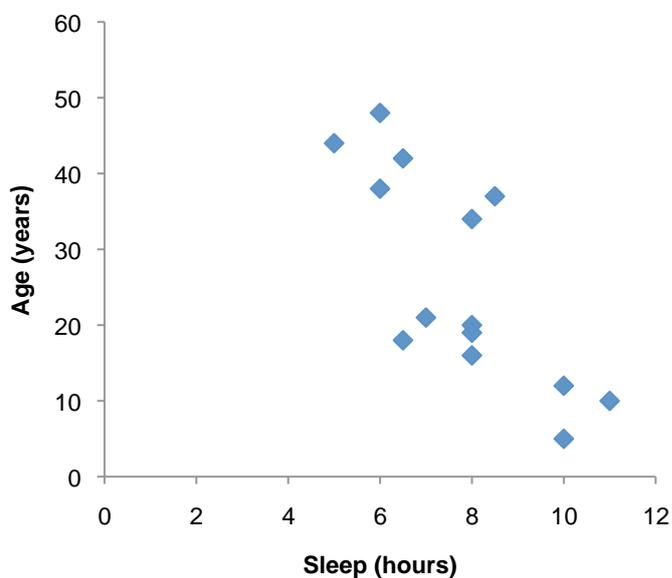
Table 2: Responses to “How satisfied are you with your life at present?”

Woman's ID number	Satisfaction score	
	At 6 months pregnant	When baby 6 months old
1	3	3
2	2	3
3	1	3
4	3	1
5	2	3
6	3	3
7	0	0
8	3	3
9	2	3
10	3	2

- (a) Identify the sampling method used by the psychologist in this research. [1]
- (b) Identify **four** ways that the researcher behaved in an ethical way when conducting her research. [4]
- (c) Calculate the mean satisfaction score for ‘6 months pregnant’ condition. You should show your calculations. [2]
- (d) Calculate the mean satisfaction score for the ‘when baby is 6 months old’ condition. You should show your calculations. [2]
- (e) Give **one** conclusion that can be drawn from the mean satisfaction scores [calculated in 8(c) and 8(d)]. [3]
- (f) Explain **one** strength and **one** weakness of using the mean score as a measure of central tendency in this research. [4]
- (g) The researcher found that the quantitative data collected to represent satisfaction scores was not very detailed and so she decided to repeat her research, but this time collecting qualitative data. Explain how the researcher could do this. You should identify and justify an appropriate methodology in your answer. [3]

Questions continue on the next page

9. A team of psychologists wants to investigate if the amount of sleep required corresponds with age. They ask 15 participants, chosen at random from the register of a local surgery, to self-report over a period of a week 'How many hours sleep they have each night?' and 'How old are you?' The researchers averaged the weekly night sleep and then plotted the results from these two questions onto a scatter diagram, see below:



- (a) Suggest a suitable null hypothesis for this research. [2]
- (b) One of the research team is concerned about the internal reliability of this study. Outline **one** issue of internal reliability that may arise in this research. [2]
- (c) Explain how the reliability issue noted in (b) could be assessed. [3]
- (d) The researchers used a Spearman's rank order correlation coefficient to further analyse their data. Justify why this test is appropriate for analysing the data collected in this research. [3]
- (e) One of the research team decides that he would like to repeat this research, but instead of using self-reports decides to invite the participants to his sleep laboratory where they will spend each night for a week under his observation. Explain how this might impact on the results. [4]

End of questions