



**GCE A LEVEL – NEW**

A290U20-1



S17-A290U20-1



**PSYCHOLOGY – A level component 2**  
**Psychology: Investigating Behaviour**

WEDNESDAY, 14 JUNE 2017 – AFTERNOON

2 hours 15 minutes

**ADDITIONAL MATERIALS**

In addition to this examination paper, you will need a WJEC pink 16-page answer booklet.  
You may require a calculator and a ruler.

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen.  
Answer **all** questions.  
Write your answers in the separate answer booklet 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 necessity for good English and orderly, clear presentation in your answers.  
Assessment will take into account the quality of written communication used in your answers.

**SECTION A - Principles of Research**

*Answer all questions.*

1. Explain **one** strength of conducting research on-line. [3]
  
2. Describe the main features of a content analysis. [4]
  
3. Explain how you would calculate the median value in a set of data. [2]
  
4. (a) Describe what is meant by a cross-sectional study. [3]  
  
(b) Describe what is meant by a longitudinal study. [3]  
  
(c) Justify why cross-sectional studies might be more appropriate than longitudinal studies when conducting research in psychology. [6]
  
5. (a) Describe the methodology used by Kohlberg in his 1968 research '*The child as a moral philosopher*'. [3]  
  
(b) Describe the sample used by Kohlberg in his 1968 research '*The child as a moral philosopher*'. [3]  
  
(c) Discuss the validity and ethical issues raised by Kohlberg's (1968) research '*The child as a moral philosopher*'. [12]

## SECTION B - Personal Investigations

You should *answer all the questions* in this section with reference to the investigations carried out in your study of psychology

**INVESTIGATION ONE:** A Correlation research – relationship between age and reaction times.

6. (a) State the operationalised co-variables that you used in your correlational research. [2]
- (b) With reference to your own correlational research, explain how you ensured that your research was ethical. [6]
- (c) Identify and fully justify the inferential statistical test that you used when analysing the data collected in your correlation. [4]

**INVESTIGATION TWO:** An observation of gender differences in food choices.

7. (a) State the operationalised alternative hypothesis for your observation. [3]
- (b) (i) Describe the observational sampling technique that you used in your observation. [2]
- (ii) Explain why you chose to use this observational sampling technique in your observation. [3]
- (c) With reference to your own observation, explain how you ensured your research was valid. [4]
- (d) Suggest **two** ways in which your own observational research could have been improved. [6]

### SECTION C - Application of research methods to a novel scenario

Answer all questions.

8. A developmental psychologist was concerned about the amount of time pensioners spent alone each day. He decided to conduct a semi-structured interview with pensioners who were shopping alone at a local supermarket. One of the questions the developmental psychologist asked each participant was 'On a scale of 0 (never) to 10 (all the time), rate how lonely you feel'. The results to this question are displayed in the table below:

Participant number	1	2	3	4	5	6	7	8	9	10
Loneliness rating (0-10)	3	4	5	4	6	10	3	0	5	5

- (a) Explain **two** strengths of using a semi-structured interview in this research. [2+2]
- (b) Explain why the question 'On a scale of 0 (never) to 10 (all the time), rate how lonely you feel' should produce quantitative data. [2]
- (c) Suggest **one** question that could be used in this research that could produce qualitative data. [2]
- (d) The total of the loneliness ratings given by the ten pensioners was 45. State the mean of the loneliness ratings. [1]
- (e) Explain why the mode might be an appropriate measure of central tendency for describing these loneliness ratings. [2]
- (f) (i) Identify **one** method, other than a semi-structured interview, that could be used by the developmental psychologist to investigate loneliness in pensioners. [1]
- (ii) Explain why the method identified in (f)(i) would be appropriate in this research. [3]

9. A psychologist investigated if the reading confidence of primary school children could be improved if they routinely read to a therapy dog. In September, the psychologist asked two teachers to rate the reading confidence levels of the 62 children in their classes. The teachers rated the children as having low, medium or high reading confidence. The psychologist used stratified sampling to select 10 children. These children spent 30 minutes per week reading aloud to a therapy dog. At the end of March, the teachers rated the reading confidence of the children. The psychologist then compared their reading confidence ratings to investigate if there had been any change. The raw data recorded by the researcher was as follows:

Name of child	Sex	Reading Confidence Rating in September	Reading Confidence rating in March
Rachel D.	Female	Medium	High
Lois B.	Female	Low	High
Robert W.	Male	Low	Medium
Maisie M.	Female	Medium	High
Frances H.	Female	High	High
Andy F.	Male	Medium	Low
Mohamed H.	Male	Low	Medium
Maryam J.	Female	High	High
James B.	Male	Low	High
Sam H.	Male	Medium	High

- (a) (i) Outline what is meant by the term 'target population'. [2]
- (ii) Identify the target population in this research. [1]
- (b) Explain how the psychologist might have selected the 10 children using a stratified sampling technique. [2]
- (c) (i) Describe **one** issue of internal reliability that may have occurred in this research. [2]
- (ii) Explain how this issue of reliability, identified in (c) (i) could be assessed. [3]

- (d) The researcher analyses the data using a Sign test. The observed (calculated value) of  $s$  was 1. With reference to the table below, explain if the researcher should accept or reject their hypothesis that 'The reading confidence of a child will increase after six months of reading to a therapy dog', using a probability value of 5%. [3]

Critical values for a Sign test

Level of significance for a directional (one-tailed) test			
Level of significance for a non-directional (two-tailed) test			
N	0.20	0.10	0.05
8	1	1	0
9	2	1	1
10	2	1	1

*Observed (calculated) value of  $s$  is significant at a given level, if it is equal to or less than the critical value.*

- (e) Identify and explain **one** ethical issue that is evident in this research. [3]

**END OF PAPER**

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