

Candidate Marks Report

Series : 6 2018

This candidate's script has been assessed using On-Screen Marking. The marks are therefore not shown on the script itself, but are summarised in the table below.

Centre No :	Assessment Code :	H567
Candidate No :	Component Code :	01
Candidate Name :		

Total Marks :

In the table below 'Total Mark' records the mark scored by this candidate.
'Max Mark' records the Maximum Mark available for the question.

SECTION A: Multiple choice

Answer all the questions.

- 1 Which of these is a weakness of a quasi experiment?
- A control of the dependent variable
 - B control of the independent variable
 - C control of the measurement of the dependent variable
 - D control of the measurement of the independent variable

Your answer

 B

[1]

- 2 Which does not have both an IV and DV?

- A correlation
- B field experiment
- C laboratory experiment
- D quasi experiment

Your answer

 A

[1]

- 3 What is it best to do with extraneous variables?

- A eliminate them
- B ignore them
- C monitor them
- D record them

Your answer

 A

[1]

- 4 What best describes the target population?

- A the people you want to study and apply the findings to
- B the people you want to study and conduct research on in a follow-up study
- C the people you want to study and obtain data from
- D the people you want to study and use in the research

Your answer

 A

[1]



5 What is the name given to data before any analysis is performed?

- A interval
- B ordinal
- C quantitative
- D raw

Your answer

D

[1]

6 What is the name for the type of reliability that involves dividing a test into two parts and comparing scores on both parts of the test?

- A semi-structured
- B split-half
- C test-retest
- D two-tailed

Your answer

B

[1]

7 Which of these inferential statistical tests does not require the data to be ranked as part of the calculation?

- A Chi-square *nominal*
- B Mann-Whitney U test *ordinal*
- C Spearman's Rho *correlation*
- D Wilcoxon Signed Ranks test *ordinal*

Your answer

A

[1]

8 Which of these is an advantage of secondary data?

- A already exists
- B easy to analyse
- C easy to interpret
- D ecologically valid

Your answer

A

[1]



9 What is meant by the term 'significant result'?

- A it is a figure that you compare the answer from an inferential statistical test with
- B it is an answer that exceeds a certain probability level
- C it is an answer that tells us something important
- D it is an approximate answer

Your answer

A

[1]

10 In research terms, what is meant by 'social desirability'?

- A responding in a way that is approved of by society
- B responding in a way to be perceived as more friendly
- C responding in a way to please the researcher
- D responding in a way to provide the researcher with what is expected

Your answer

A

[1]

11 In which section of a practical report write-up would you find details of standardised instructions given to participants?

- A abstract
- B appendices
- C discussion
- D introduction

TAIMRDR

Your answer

B

[1]

12 What is 'the Harvard system'?

- A a way of presenting results from an inferential statistical test in a practical report
- B a way of providing details of the materials used in a practical report
- C a way of summarising how participants were obtained in a practical report
- D a way of writing academic references in a practical report.

Your answer

D

[1]



13 Which best describes what a semantic differential rating scale is?

- A selecting a point on a line to indicate your strength of opinion about something
- B selecting a point on a line to respond to how much you agree with something
- C selecting a point on a line with different numbers along it
- D selecting a point on a line with words that have opposite meanings at either end

Your answer

A

[1]

14 Who conducts a peer review?

- A a government minister
- B a statistician
- C fellow academics
- D lay persons

Your answer

C

[1]

15 Which of these different types of data would not include any information in the form of words?

- A interval
- B nominal
- C qualitative
- D secondary

Your answer

A

[1]

16 Which of these could not be the answer from a Spearman's Rho inferential statistical test?

- A -0.728
- B 0.3
- C 0.892
- D 1.52

Your answer

D A

[1]



17 What is the mode in this set of data?

17, 19, 12, 23, 17, 25, 19, 17

- A 17
- B 17.5
- C 18
- D 19

Your answer

A

[1]

18 The variance of a set of scores is 14.44. What is the standard deviation?

- A 1.4
- B 3.8
- C 14.0
- D 208.51

$$\sqrt{\frac{\sum(x_i - \bar{x})^2}{n}}$$

Your answer

D

[1]

19 Which variable was negatively correlated with length of time as taxi driver in the Maguire et al. study?

- A volume of grey matter in the anterior hippocampus
- B volume of grey matter in the central hippocampus
- C volume of grey matter in the hippocampus
- D volume of grey matter in the posterior hippocampus

Your answer

A

[1]

20 What type of data was collected in the Piliavin et al. study for the dependent variable of length of time that it took for help to be offered?

- A interval
- B non-parametric
- C qualitative
- D secondary

Your answer

A

[1]



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Turn over for the next question.



SECTION B: Research design and response

Answer all the questions.

Travel log. How do people pass the time on a long journey? Some people seem to cope better than others and manage to keep themselves occupied or simply don't mind (perhaps even enjoy) the rest. Others find it more difficult and can become bored and restless. Psychologists want to use the naturalistic observation method to investigate this and find out if some types of behaviour and actions are more common than others.

21 Write an appropriate research aim for the study.

The aim of this study is to investigate coping strategies (occupied or not) on people's mood (Coping negative or positive actions). Coping strategies will have a positive effect on actions. [2]

22* Explain how you would use the naturalistic observation method to conduct this research. Justify your decisions as part of your explanation.

In your answer, the required features that you must refer to are:

P1, S1, P, R

- participant or non-participant observation
- behavioural categories
- time or event sampling
- how data will be recorded during the observation

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

In this study the aim is to investigate the effects of coping strategies on a (whether people keep themselves occupied or not) with and its effect on mood, (whether displayed actions are positive or negative). The naturalistic observation. The outcome of the study is that the coping strategies used will have a positive effect on displayed actions and behaviour. The sampling method will be an opportunity sample using passengers on overground trains. This will give a good variation in terms of age, sex and



occupation depending on the time the observations are made. Using experimenters set in central parts of the carriages, they will covertly record the behaviour they see on the train, or making notes on their phone to avoid suspicion. In terms of validity, this study will carry good ecological validity as I would be observing random people in a natural setting where subtle hints of behaviour can be seen in its rawest form. When conducting my own personal research on Facebook and social media imagery on mood personality, an opportunity sample of ¹⁰ school children was used for both their own pictures and their friends. In this study however, it is a non-participant observation. As this study is being conducted in the UK, there may be an issue of generalisability to different cultures as not all countries have the similar experience on overground railways transport or may even use a railway. Reliability will be achieved by having three sets of 6 observers go on different times and days across one week on different overground systems. This way, inter-rater observer reliability can be achieved by dividing results by the number of agreements and by using different ~~observers~~ railway systems. External validity & reliability will be high if the results produced are the same. Issues with ethics will involve confidentiality, therefore as P's will not know they are being observed [15]

(Additional answer space.)



23 Describe two things that may influence the inter-rater reliability of this study.

Two things in this study influencing inter-rater reliability in this study are situational variables such as the time of day because more people could fall asleep if behaviour is observed in the night leading to similar behaviours being recorded or if there are too many people to record on the train during rush hour periods. Another influence on inter-rater reliability in this study is participant variables as majority of people on the train could just be well seasoned travellers and keep themselves occupied when travelling on the overground. [6]

24 Outline one strength and one weakness of using the naturalistic observation method in this study.

One strength of using a naturalistic observation in this study is that people on trains and general modes of public transport often display unconscious behaviours, traits and emotions that a well-trained observer could analyze in a natural environment. One weakness is that of this observation method in this study is that there is no control for extraneous variables because of the environment such as the delays on the train, demand characteristics such as participant effects if people look to see the observers watching them. [6]



25 Describe two ways you would address the ethical consideration of 'responsibility' in relation to this study.

^{Two ways to solve ethical}
 The ethical issue of responsibility within this study
 would be that all the passengers on the train have their
 results discarded if they are to find out the aims of
 the observation as they may wish to
 withdraw therefore they are allowed that right and
 that if any pt that find out about the study,
 decide to stay, they must be debriefed on why
 their behaviour was being recorded and no names
 or other forms of identity will be kept as a form
 of privacy.

[6]



SECTION C: Data analysis and interpretation

Answer all the questions.

Love is in the (question) air. We can fall 'in to it' and 'out of it', it can make us feel both happy and sad or even angry and mad, but what is love? Psychologists decided to investigate this further by using the self-report method in which they posted out a questionnaire to members of the public to complete. Some of the data from the first twenty males and first twenty females to respond are presented in the tables below.

Table 1: Ratings of the importance of physical appearance for being in love given by male and female participants
(1= 'not very important' to 10 = 'extremely important')

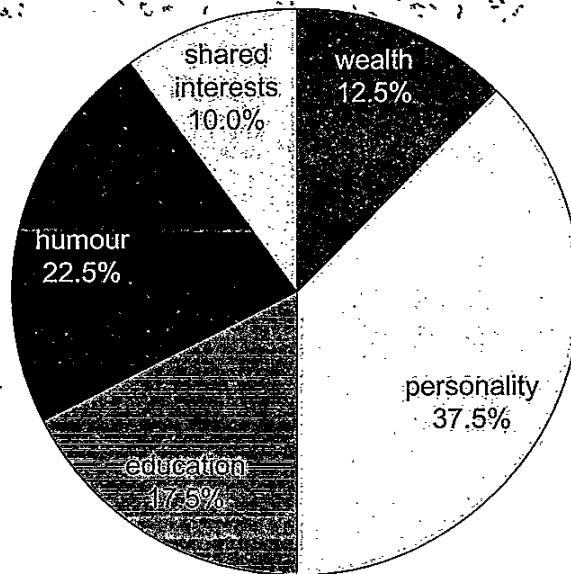
males	females
7	3 /
5	7 /
9	1 /
10	6 /
8	4 /
7	9 /
7	6 /
9	3 /
8	5 /
10	3 /
9	5 /
10	3 /
9	5 /
9	5 /
7	3 /
6	7 /
5	5 /
6	1 /
7	3 /
9	2 /

Table 2: Responses to the question 'do you believe in love at first sight?'

	yes	no
males	5	15
females	12	8

Figure 1

Pie chart showing the percentage of people who thought which attributes were the most important for being in love with someone



- 26 A partly completed table of measures of central tendency for the data collected in Table 1 is presented below.

Measures of central tendency for the ratings of the importance of physical appearance for being in love given by male and female participants		
	males	females
mean	7.9	4.3
median	8.0	4
mode	9.0	3

Answer the following questions so that the rest of the table can be completed. Show all your workings.

- (a) Calculate the mean rating of the importance of physical appearance for being in love given by males. Write your answer to two significant figures.

$$7+5+9+10+8+7+7+9+8+10+9+10+9+9+7+6+5+$$

$$6+7+9$$

$$= 157$$

$$157 \div 20 = 7.85 = 7.9$$

[3]

- (b) Calculate the median rating of the importance of physical appearance for being in love given by females.

$$1, 1, 2, 3, 3, 3, 3, 3, 4, 5, 5, 5, 5, 6, 7, 7, 9$$

$$1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15$$

$$\text{Median} = 4$$

[2]

- (c) What is the mode for the importance of physical appearance for being in love given by females?

$$3$$

[1]



- 27 (a) What is the range for the rating of the importance of physical appearance for being in love given by males and females? Show your workings.

Highest rating men frequency = $16 \div 10 \div 10 = 30$

lowest = 10

highest woman = 9

lowest = 2

~~39~~ $30 - 12 = 27 = \text{range}$

[4]

- (b) Outline **one** conclusion from the calculation of the range for the rating of the importance of physical appearance for being in love given by males and females.

One conclusion from the calculation of the range is that women place less emphasis on physical appearance for being in love than men do because the range in their ratings was ~~less~~ smaller than the male ratings.

[3]



- 28 (a) Using the formula provided calculate the value of Chi-square for the data in the table below. The E values (expected frequencies) have already been provided (in the table in italics). Show your workings.

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Responses to the question ... 'do you believe in love at first sight?'		
	yes	no
males	5 <i>(8.50)</i>	15 <i>(11.50)</i>
females	12 <i>(8.50)</i>	8 <i>(11.50)</i>

$$O = 5 + 15 + 12 + 8 = 40$$

$$E = 8.50 + 8.50 + 11.50 + 11.50 = 40$$

$$\frac{40 - 40}{2} = \frac{(40 - 40)^2}{40}$$

$$\chi^2 = \frac{(40 - 40)^2}{40}$$

$$\chi^2 = 0$$

$$\chi = 0$$

[5]



- (b) Using the extract of the tables of critical values for the Chi-square test presented below, what is the critical value at the 5% probability level for data collected in this study?

Degrees of freedom (df)	Probability level		
	0.5	0.05	0.01
1	0.455	3.841	6.635
2	1.386	5.991	9.210
3	2.366	7.815	11.345
4	3.357	9.488	13.277
5	4.351	11.070	15.086

The critical value at the 5% level

[2]

- (c) Write the significance statement for the analysis performed on this data using the Chi-square test.

The observed value is greater than the critical value, therefore we reject the null hypothesis.

[2]

rule of R



- 29 Using the data presented in the pie chart in Figure 1 on page 12, calculate the ratio of how many people said that personality was the most important thing for love compared to those that said wealth was. Show your workings.

$$37.5\% \text{ personality} = 38$$

$$12.5\% \text{ Wealth} = 13$$

$$37.5 : 12.5 \div 5$$

$$7.5 : 2.5$$

$$8 : 3$$

[4]

- 30 Evaluate the population validity of the data collected in this study.

Population validity of the study in this data is good because it has been sent out towards the general public and which allows for variation of results, however the population the self report method will lead to more honest results however in this study there is an evident response set from the males as majority of their answers are the same which suggests that the areas where the first twenty males filled out the questionnaires are all the same which means population validity is low.

[6]

constant



31 The discussion section of the write-up of a practical report includes a conclusion made from the analysis of the data collected. Outline one conclusion from the discussion section of any of your own practical activities.

One conclusion from the research conducted on anchoring of prices on common items was that prices ~~se~~ when participants had a higher arbitrary point being the last two digits of their phone number, the price estimate they would make for common prices was higher. [3]

END OF QUESTION PAPER

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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).

22*

But for the validity of the research will be low if the naturalistic observation was overt and people found the aims of the study. Participants also cannot withdraw as they will not know they are taking part until their journey ends. Issues of ethnocentrism may also occur as people travelling on airground UK rail systems are mostly british middle-class. In terms of the data sampling method, time sampling will be used to observe the changes between the set behavioural categories of calm, uneasy, occupied and unoccupied along with a list of common body language traits such as folded arms, facial scowls etc.



Handwritten text on a lined page, mostly illegible due to blurriness. The text appears to be a list or series of entries, possibly related to a curriculum or assessment. Some words like 'mathematics', 'science', and 'history' are faintly visible.

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