

LOCATION: SWANSEA

LLEOLIAD: ABERTAWE

LEVEL 4

LEFEL 4

EXAMINATION PERIOD

CYFNOD ARHOLIADAU

MODULE CODE: ECPS4003
RESEARCH METHODS

MOCK EXAM

THIS PAPER CONSISTS OF THREE SECTIONS.

SECTION A: MULTIPLE CHOICE QUESTIONS (25 MARKS)

SECTION B: SHORT ANSWER QUESTIONS (50 MARKS)

SECTION C: BASIC STATISTICS QUESTIONS (25 MARKS)

YOU SHOULD ANSWER ALL QUESTIONS IN ALL THREE SECTIONS.

YOU MUST WRITE ALL YOUR ANSWERS IN ONE WORD DOCUMENT AND SUBMIT VIA TURNITIN.

CALCULATORS ARE ALLOWED. ONE RESEARCH METHODS BOOK IS ALLOWED.

Equipment or materials required – None

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SECTION A: MULTIPLE CHOICE QUESTIONS (25 MARKS)

ANSWER ALL QUESTIONS: Write your answers in your answer booklet.

Read the following accounts of psychological research studies and answer the questions that follow them.

Study 1

Researchers interested in the relationship between personality and race attitudes carried out a questionnaire study. They predicted that people scoring high on introversion would be less likely to display prejudiced attitudes towards other races. Personality was measured using Eysenck's Personality Inventory and in this scale the higher the score the more introverted the participant. Racial attitudes were measured using the Modern Racism Scale with higher scores indicating more prejudicial attitudes. Sixty participants were measured on both questionnaires. The correlation between scores of introversion and prejudice was ($r = -0.38$). The probability of the result being due to chance was less than 5 in 100.

1. The design of the study was [2]
 - a. correlational
 - b. within-subjects
 - c. between-subjects
 - d. none of the above

2. The study found [3]
 - a. a significant negative relationship between introversion and prejudice
 - b. no significant relationship between introversion and prejudice
 - c. a significant positive relationship between introversion and prejudice
 - d. none of the above

3. The hypothesis of the study predicted [3]
 - a. a negative correlation between introversion and prejudice
 - b. simply a correlation (positive or negative) between the two sets of scores
 - c. a positive correlation between introversion and prejudice
 - d. none of the above

4. A probability of less than 5 in 100 is expressed as [3]
 - a. $p > .5$
 - b. $p < .5$
 - c. $p > .05$
 - d. $p < .05$

Study 2

Dr Morris is an occupational psychologist and researcher and is working with a team who want to explore the effects of Covid-19 on workplace anxiety. As part of the project, he plans to recruit up to 12 adults who had been required to 'shield' for a period of at least six weeks during the Covid-19 pandemic, and who have now returned to work. Given the plans to get an in-depth understanding of the ways in which work-related anxieties were being perceived by these individuals, he decides to utilise a qualitative methodology. Each participant was asked to take part in a one-to-one discussion with Dr Morris and an interview schedule was constructed to guide discussions and prompt participant responses where required. Each interview was audio recorded and the final transcripts were analysed using Interpretative Phenomenological Analysis (IPA).

1. What type of method of data collection has Dr Morris used? [2]
 - a. Focus groups
 - b. Experimental
 - c. Semi-structured interviews
 - d. Participant observation.
2. Which of the below would be one responsibility the researcher would have using this type of data collection method? [3]
 - a. To use open-ended prompts to help guide the discussions when needed but ensure that participants feel able to express their own view and opinions
 - b. To allow the conversation to drift as much as possible away from the topic in question in order to gain more data
 - c. Express their own personal opinions as a way of directing further discussion
 - d. To highlight the existing issue of the lack of support for individuals experiencing anxiety at work as a result of the Covid-19 pandemic as a way of gaining more discussion from participants
3. For what reason may Dr Morris have chosen IPA over thematic analysis? [3]
 - a. IPA is more flexible
 - b. He wanted to understand the lived experiences of the individuals and IPA allows for more depth in interpretation.
 - c. Thematic analysis is not a type of qualitative analysis
 - d. None of the above
4. Why is it important that any personal data collected during this research study are kept within secure and confidential records? [3]
 - a. So that the participants cannot find out what has been written about them
 - b. So that government officials and the owners of the organisations they work at can have easy access to the data
 - c. To enable the researcher to track down individuals and find out more about their lives and experiences
 - d. So that individuals, places and organisations cannot be harmed through identification or disclosure of personal information

5. One of the participants expresses a worry that, if their manager found out about the information they had shared in the interview, they would lose their job. What must Dr Morris do to ensure that participants are aware of what is expected of them and what will happen following completion of the study before they take part? [3]
- a. Ensure fully informed consent which includes the right to withdraw their data at any points during or after their interviews
 - b. Ensure that participants are aware of the confidential nature of the research and that individual information will not be passed on to anyone directly involved in the care of their family member
 - c. Confirm in writing that any personally identifiable information (names, location, or context) will be changed or removed to protect confidentiality in any presentation of study findings
 - d. All of the above

SECTION B: SHORT ANSWER QUESTIONS (50 MARKS)

ANSWER ALL QUESTIONS: Write your answers in your answer booklet.

Carefully read through the following description of a study and then answer all of the questions listed below.

Study 1

A student wants to explore whether there is a link between the type of music that people usually listen to and their levels of aggression. He carries out a literature review and finds that previous studies have been carried out in many different ways; some have asked people for their music preferences and then measured their levels of aggression, whilst others have manipulated the music that they listen to.

The student decides to play both classical and death metal music to participants, measuring their aggression levels with a questionnaire after listening to each music type (e.g., classical – questionnaire – death metal – questionnaire). The student uses different wording in the two questionnaires, but consults the literature to ensure that the questionnaires are measuring the same thing (therefore they are equivalent forms). He also counterbalances the study so that half of the participants hear the classical music first, and half hear the death metal first.

On further reading of the literature the student discovers that some studies have found that there is a difference between genders in this type of study, whilst other studies have found no difference of gender. The student decides to use both males and females for his study. After the study is completed the student is left with 80 questionnaires from 40 participants showing their scores on a scale of 1 – 10 for twenty questions relating to how aggressive they feel.

1. Is this experiment a within-subjects or between-subjects design? Explain your answer, and why this type of design may be preferable for the study. [2]
2. What is the independent variable, and how is it to be manipulated? [2]
3. What is the dependent variable, and how will it be measured? [2]
4. What variables has the student controlled for and why is this important? [6]
5. Are there any potential confounding variables for this study? If so, what are they and how might the student deal with them? [6]
6. What ethical issues might the study raise? What could the student do to resolve these issues? [6]

Study 2

A PhD researcher (Deborah) is aiming to explore the ways in which pregnant women perceive their care to have been impacted because of the covid-19 pandemic. She receives full University and NHS ethical approval to recruit potential participants from the antenatal department at a local hospital and to set up a 'stall' within the waiting room for a period of four weeks to recruit participants. When women were attending their routine antenatal appointments at the hospital, Deborah was set up in the main waiting area with a poster containing information about the study and a notification that if anyone was interested in taking part, they could ask her for more information.

After a period of three weeks spent at the hospital looking to recruit participants, she had only managed to recruit three women to take part in her study. During her fourth week she decided to approach the women attending their antenatal department directly and give them an information sheet containing all the information from the study. As a result of this, a further four women agreed to participate and provided their contact details to Deborah to arrange a convenient time to take part. Deborah also asks her close friend who is currently pregnant to take part.

Deborah managed to arrange to interview four of the women individually but decided to organise a focus group with the remaining four women to save time; one of whom was her close friend. She adapted the questions contained within her interview schedule slightly to accommodate for the change to a focus group situation and arranged to meet with the women. During the focus group, she starts to engage in the conversation with the women and provide information on her own experience of giving birth during a pandemic; she explains that she is six-months post-partum and that she also attended her antenatal appointments at the hospital she has recruited participants from.

Following the focus group, Deborah transcribes the session and arranges a catch up with her friend. They begin to discuss what was said during the focus group and share their thoughts on the women's experiences being like what they feel they have experienced.

1. What type of qualitative method would be best preferred to collect data for this study; interviews or focus groups? Explain your answer. [4]
2. Are there any conflicts of interest present in this study? If so, what are they and why might this be an issue? [10]
3. Are there any breaches of ethics that have occurred? If so, what are they and why would they be considered a breach of ethics? Refer to the appropriate ethical guidance in your answer where applicable. [12]

SECTION C: BASIC STATISTICS QUESTIONS (25 MARKS)

ANSWER ALL QUESTIONS: Write your answers in your answer booklet.

A researcher is carrying out a study into the effects of alcohol on coordination and stability. She finds ten people willing to carry out her study and gives each of them three units of alcohol. She then asks them to carry out a task of transporting a ball on a spoon for a distance of thirty metres whilst blindfolded. The amount of times each subject drops the ball during this task is recorded.

Participant	Times ball dropped
1	8
2	3
3	7
4	3
5	7
6	2
7	7
8	6
9	3
10	54

1. Calculate the mean for the participant scores [5]
2. Calculate the median for the participant scores [5]
3. Calculate the mode for the participant scores [5]
4. Which of these measures of central tendency would be best used to explain the dispersion of these scores? Give your reasons for choosing this measure and also your reasons for not choosing the other measures. [10]