AQA Psychology A-level

Topic 7: Research Methods

Example extended answers/essays

Question : Discuss ethical issues in psychological research. Refer to Milgram's study in your answer (8 marks).

Firstly there is the ethical issue of informed consent. This is when the participants need to be informed about what the research study is investigating and about any potential harm to the participant. This allows the participant to then make a judgement on whether they want to take part in the study or not. In Milgram's study, this ethical issue was not adhered to since information that the electric shocks were fake was not given to them and this could have easily led to psychological harm as the participants thought they were hurting someone.

Secondly there is the issue of deception. Deception is when a researcher witholds or gives misleading information to a participant. This is usually done since revealing the true nature of the experiment may cause demand characteristics, affecting the validity of the results. In Milgram's study participants were deceived since they were not aware that the electric shocks were fake and that the screams were staged.

To deal with this ethical issue participants are fully debriefed before, after and even during the experiment. They are supposed to be told the aim of the study, how it will be operationalised and any risks involved.

Another ethical issue is protection from harm. Participants need to be aware of all potential risks and have the right to withdraw at any time. In Milgram's study this was not followed since when the participants refused to continue, the experimenter used prods like 'the experiment requires that you continue' to encourage them to still take part. This was unethical since the participants should have been allowed to withdraw immediately, not after the prods were used and failed.

Lastly there is the issue of privacy and confidentiality. This is the right that participants have to control how their data is used after its collected and the privacy of their lives to be respected by the researchers. In Milgram's study their privacy was respected as the study was done in a lab, not at their homes, so did not invade their personal space.

Marks: 8 marks
Teacher's comment: Well done.

Question : Read the item and then answer the questions that follow:

A psychologist wanted to see if verbal fluency is affected by whether people think they are presenting information to a small group of people or to a large group of people.

The psychologist needed a stratified sample of 20 people. She obtained the sample from a company employing 60 men and 40 women.

The participants were told that they would be placed in a booth where they would read out an article about the life of a famous author to an audience. Participants were also told that the audience would not be present, but would only be able to hear them and would not be able to interact with them.

There were two conditions in the study, **Condition A and Condition B.**

Condition A: 10 participants were told the audience consisted of 5 listeners.
Condition B: the other 10 participants were told the audience consisted of 100 listeners.

Each participant completed the study individually. The psychologist recorded each presentation and then counted the number of verbal errors made by each participant.

1) **Identify the independent variable in this study. (2 marks)**

Whether the people think they are presenting information to a small audience **of 5 listeners** or a large audience of **100 listeners**.
Mark: 1 mark
Teacher's comment : add in numbers they think they are listening to for further marks.

2) **Write a suitable hypothesis for this study. (3 marks)**

The more people the participant thinks they are presenting information to, the more verbal errors they will make so people in condition B will do worse, have more verbal errors than people in condition A, who will have less verbal errors on the verbal fluency test.
There will be a difference between the number of errors on a verbal fluency test task in participants who perceive they are presenting to an audience of 100 people compared to an audience of 5.
Mark : 2 marks
Teacher's comment: add number of participants in each condition.

3) **Identify one extraneous variable that the psychologist should have controlled in the study and explain why it should have been controlled. (3 marks)**

One possible confounding variable could be differences in how instructions were delivered to the participants, should have been controlled as differences in delivery would result in experimenter bias which reduces the validity of the results. **Experimenter bias could lead to a participant guessing the aim of the study which influences how they act. Therefore the instructions should be the exact same standardised instructions with each participant so there's no bias presented.**

Marks: 2 marks
Teacher's comment : incomplete explanation of why the variable should have been controlled.

4) **Explain one advantage of using a stratified sample of participants in this study. (2 marks)**

The sample is able to be representative of the target population especially as in the company there are more men than women.
Marks : 2 marks

5) **Explain how the psychologist would have obtained the male participants for her stratified sample. Show your calculations. (3 marks)**

The psychologist needs 20 participants in total. So to get the number of women in the sample, the psychologist will first calculate percentage of men in target population then multiply by 20 to get the amount needed.
60/100 x 20 = 12 men to be sampled and this could be done through generating 12 numbers from 1 to 60 using a random number generator.
Marks: 3 marks.

6) **The psychologist wanted to randomly allocate the 20 people in her stratified sample to the two conditions. She needed an equal number of males in each condition and an equal number of females in each condition. Explain how she would have done this. (4 marks)**

The psychologist having already had the 20 participants divided into 12 men and 8 women, could first take the 12 men's names and give each of them numbers. Then use a random number generator to get the numbers in the range used for the men's list. The first 6 will go to condition A and the second 6 to condition B. She would have then done the same with the women so that the first 4 goes to condition A and the second 4 to condition B.

Marks: 4 marks.
Teacher's comment: Excellent.