

Sample Answer:

Paper 1 (2025): Section B; 15-mark questions

Um, erm and ah

Disfluencies are disruptions in the flow of spoken language, including stuttering and hesitations, such as 'um', 'erm' and 'ah'. These often indicate emotions, such as feelings of anxiety and distress. A psychologist wants to investigate this further by conducting a correlation study to see if there is a relationship between the disfluencies a person makes and how anxious they feel while making a public speech.

Explain how you would conduct a **correlation** study to investigate if there is a relationship between the disfluencies a person makes and how anxious they feel while making a public speech.

Justify your decisions as part of your explanation.

You must refer to:

- how you would use self-selected sampling to obtain participants for the study
- how you would operationalise the variable 'disfluencies'
- how you would operationalise the variable 'anxiety'
- the control of one extraneous variable.

You should use your own experience of practical activities to inform your response. **(15)**

Sample Answer

In this study I would use a self-selected sample by placing an advert in the university library and cafeteria asking for participants to take part in a short verbal presentation activity. The advert would state that any student aged 18-22 years could apply and that the activity would only take 15 minutes of their time. The advert would also include full contact details (e.g. email/ telephone number) for the researcher. It would state that there would be a small fee for participation. The first 20 participants to contact the researcher would be included in the study. This sampling method is cheap and easy to conduct as the researcher only needs to place the advert and await replies. However, this method may not give a representative sample, as all one age group or sex could apply. Similarly in my correlation study I too used a self-selected, volunteer sample which was an efficient way to collect my 10 participants. I did this by placing a poster on the college noticeboard, so all sixth formers could see. The poster had my contact details on. Once I had the sample I needed, I removed the poster.

In this study I would operationalise the variable of 'disfluencies' by counting the number each participant made, such as 'um', 'erm' and 'ah' in the 5-minute verbal presentation. Participants would be asked to verbally read a scripted presentation about a topic in Psychology. They would be

told that the recording would be listened to by a group of 50 students later that day. The presentation would be audio recorded and each participant would receive a score (number of disfluencies made) giving numerical data which can be analysed in the correlation. In my study I also collected quantitative data for each of my two variables; self-ratings of aggression and the number of siblings participants had, which was easy to analyse. An advantage of this type of data is that it can be statistically analysed using a Spearman's Rho test, which is reliable.

In this study I would operationalise the variable of 'anxiety' by asking participants to rate how anxious they felt before the verbal presentation on a Likert scale of 1 to 5, where 1 indicates 'no anxiety at all' and 5 indicates 'very high anxiety'. This would be presented to them on a separate sheet of paper which would correspond to their participant number. Each participant would receive a score from 1-5 which would be used in the correlation analysis. This again allows for a reliable data collection, which can be used in a Spearman's Rho test. In my study I also used a 5-point rating scale to gather data about participants' self-ratings of aggression, where 1 represented 'not aggressive at all' and 5 represented 'very aggressive'. This was also a quick and easy way of gathering data from the participants.

One extraneous variable I would control for in this study would be the content of the verbal presentation I asked the participants to read. This would be a short excerpt about the topic of Psychology and would be 300 words long. It would be important to standardise this, so every participant was given the same verbal presentation, increasing the reliability of the study. It would be unfair to give different excerpts to each participant as some of the key terminology may result in more disfluencies. In my correlation I also has to control extraneous variables such as the rating scale used to measure self-ratings of aggression in my participants. This was done to ensure the findings could be compared easily and that the procedure was the same for all my participants.

Mark Scheme

Question	Answer	Marks	Guidance
		Max = 15	
Level of response	Details of required features (RFs) included	Justification of decisions made	Reference to own practical work
Good 12-15 marks	All 4 required features (RFs) addressed in context. Accurate and detailed knowledge and understanding of each feature in context. Good evidence of application of required features in context.	Appropriate justification of all decisions and some is contextualised. Well developed line of reasoning that is clear and logically structured.	Explicit reference to own practical work and clear links between own work and the planned research for each required feature, e.g. specific mention of aim or procedural features. For top band (good) 12 marks if just one RF linked, 13 marks if two, 14 marks if three and 15 if all four are linked If there is no explicit clear link between own practical work and any of the 4 required features caps the mark at 11 maximum.
Reasonable 8-11 marks	At least 3 required features in context. Reasonably accurate and detailed knowledge and understanding of each feature.	Some appropriate justification of decision related to required features (if no justification in context award 8 marks). There was a line of reasoning evident with some structure.	Overall mark Look at RF first: L4 Good – all 4 good (L4) in context L3 Reasonable – min 3 reasonable (L3) in context L2 Limited – min 2 limited (L2) in context or 3- 4 limited (L2) with no context L1 Basic – 1 basic (L1) (no context needed).
Limited 4-7 marks	At least two of the required features addressed in context Limited application of required features OR three or all four required features referred to but in a limited way If one required feature addressed in detail and justified in context and explicit links made to own practical work award 4 marks.	Attempt to justify decision(s) but weak. Evidence of some structure, but weak.	THEN look at justifications: L4 Good – at least 2 reasonable (L3) AND at least 2 of the justifications are in context (does not have to be the reasonable ones) L3 Reasonable – at least 2 limited (L2) AND at least 1 of the justifications is in context. L2 Limited – at least 1 limited (L1) (no need for context) L1 Basic – no justification or basic justification
Basic 1-3 marks	At least one of the required features addressed. Weak application of required features. OR more than one of the required features referred to but in a very brief and/or basic way.	None, or if present very weak.	NB. References to experiment in justification (e.g. helps to establish cause and effect) = basic justification.

Examiner Guidance

RF		Details of RF
1	How to use self-selected sampling to obtain participants for the study	Good - Clearly explained how self-selected sampling method has been carried out in their study in terms of procedural details (e.g. newspaper advert, contact details, how ended up with the final sample, e.g. the first 30 participants to contact the researcher would be included in the study) Reasonable - Shown reasonable attempt to explain how this has been carried out in their study (e.g. use of newspaper advert). Limited - Possibly defined (e.g. use of volunteers) OR unclear attempt to explain how this has been carried out in the study. Basic - Confuses sampling methods (i.e. alludes to some features of self-selected sampling however also includes features of other methods).
2	How you would operationalise the variable 'disfluencies'	Good - Clear details on how 'disfluencies' will be operationalised with an outline of how data is quantified to clearly give a continuous numerical value suitable for use in a correlation. It is clear how this data is collected/measured. E.g. 'Counting the number of disfluencies such as 'erm' made in 5 minutes whilst giving a public speech'. NB. For Good, candidates can specify time frame OR what the speech was about. Reasonable - Reasonable details on how 'disfluencies' will be operationalised that lead to continuous numerical value suitable for use in a correlation. It may not be completely clear how the data is collected/measured. E.g. 'Counting the number of disfluencies made whilst giving a public speech'. Limited - The way 'disfluencies' is operationalised is addressed in an unclear way, e.g. doesn't refer to a public speech, doesn't make clear what a disfluency is or more than one measure indicated (e.g. two researchers/observers noting down the number of disfluencies). NB. No reference to public speaking cannot go above limited level. Basic - Vague indication of how 'disfluencies' will be measured (e.g. noting disfluencies) or data not suitable for a correlation (i.e. reference to tallies in categories), e.g. 'Counting whether the participants <u>made disfluencies or not</u> whilst giving a public speech'.
3	How you would operationalise the variable 'anxiety'	Good - Clear details on how 'anxiety' will be operationalised. Outline of how data is quantified to clearly give a continuous numerical value suitable for use in a correlation. It is clear how this data is collected/measured, e.g. if a rating scale is used, the ends of the scale are labelled. E.g. 'Asking people to rate on a scale of 1-10 (1 = not at all anxious and 10 = very anxious) how they felt whilst giving the public speech'. Reasonable - Reasonable details on how 'anxiety' will be operationalised that lead to continuous numerical value suitable for use in a correlation. It may not be completely clear how the data is collected/measured. E.g. 'Asking people to rate on a scale of 1-10 how anxious they felt whilst giving the public speech'. NB. Naming the scale incorrectly (e.g. semantic differential scale of 1-10) limits the RF to max reasonable. Limited - The way 'anxiety' is operationalised is addressed in an unclear way, e.g. general measure of anxiety unrelated to public speaking/ 'Asking people to rate on a scale of 1-10 how anxious they feel' or more than one measure indicated. NB. No reference to public speaking cannot go above limited level. Basic - Vague indication of how 'anxiety' will be measured (e.g. asking about anxiety), scale is too small to be suitable for a correlation (i.e. it should span at least from 1 to 5) or data not suitable for a correlation (e.g. 'Asking the participants whether they felt anxious or not whilst giving a public speech').
4	The control of one extraneous variable	Good - Clear and detailed outline of how an identified (explicit or implicit) extraneous variable. Reasonable - Clear outline of how an identified (explicit or implicit) extraneous variable. Limited - Attempts to explain how an identified (explicit or implicit) extraneous variable can be controlled. Basic - Identifies an extraneous variable that can be controlled. If more than one control, credit the first one. NB. Personal characteristics (e.g. being extroverted, confident, very anxious, occupation) are not creditworthy.

