

Transition from GCSE to A Level Psychology Topic 2 Research Methods.

This Project idea is to undertake a Psychology Experiment at Home and then apply your knowledge of Research methods by writing up the procedure and analysing the results. You can use the GCSE textbook Research section (p 92 -129) or research the internet for appropriate terminology.

Task:

Conduct an Experiment that measures Concentration level.

I suggest that you use “ Mouse Concentration game “ Jan Brett, on the internet but you can use an alternative task off the web or make one up. (list as many items as you can remember in 30 seconds would work). https://www.janbrett.com/piggybacks/mouse_concentration.htm

This has to be done under 2 different conditions,

- a. In silence
- b. With loud music playing

Use people at home (and possibly friends and relatives after lockdown or get them to do it in their own homes! But they must not cheat) as your participants. You take the role as Investigator and run the Experiment (Don't participate).

Ensure you keep a clear and accurate measurement of the results. The Mouse game is recorded as total time taken to complete the task (Items game measured in the total of items remembered within the given time).

Write up tasks:

Write each term listed, briefly explain it and then apply it to the practical experiment. The first is done for you.

1. Aim – A statement about what the Researcher intends to find out in the study. Does background noise affect concentration levels?
2. Independent Variable
3. Dependent variable
4. Hypothesis (extension task would be to distinguish between directional and non- directional)
5. Extraneous variables
6. Procedures to ensure control (see p 97)
7. Experimental design (do not confuse this with experiment type), ref 100/101. Nb This would be done ideally as a repeated measures design. Within your report you could draw out the pro's and con's of all 3 designs.
8. Experiment type is Laboratory. List all 3 types and draw out strengths and weaknesses related to your experiment.
9. Sample Method. (just look at your method used)
10. Ethical considerations. (as an extension, you could design a consent form that you could give to participants in your study)
11. Express your results in quantitative manner by,
 - a. Central tendency for each Condition (mean, median, mode)
 - b. Spread of data (range)
 - c. Draw a bar chart as a comparison tool for results.
 - d. Work out the increased % of the condition with the highest score.

12. Write a conclusion paragraph. This should start with a judgement over whether the hypothesis has been proved and if so whether there is a sufficiently significant difference to draw definitive conclusions from your study.
Then analyse the strength's of the methodology of your study (what you think worked well)
Next , draw out any criticisms and explain how you would alter the structure of the study if you were to do it again.
Finally, suggest another experiment that you would like to do to further explore this issue.

Good luck to all, don't worry about getting it wrong, just go for it and enjoy it!
Please feel free to email me if you want clarification or help.

Mr Kenning

dkenning@neale-wade.org