

# Designing research studies

When you design a psychological research study you must start with the research question, which dictates what you want to find out. You must come up with a way of answering the question in a scientifically valid way. You need to make the following decisions.

Area	Key question	Choices/decisions
<b>Research design</b>	What is the basic structure of your study?	Experimental or quasi-experimental (if so, independent groups, repeated measures or matched PPs?) Correlational Longitudinal
<b>Research method</b>	How will you obtain data?	Performance on an experimental task Observation (if so, overt or covert etc.) Content analysis Self report (interview, questionnaire?)
<b>Variables</b>	What are you trying to measure and how will you measure it?	If experimental, what is the IV & how will the conditions be different? What measurements will be needed & how will you get them?
<b>Tasks &amp; materials</b>	What will you need to carry out the study?	Experimental task Observation/content analysis categories Interview schedule Questionnaire design (e.g. question types) In all cases, how will PPs' behaviour be translated into data?
<b>Controls</b>	How will you ensure your study has internal validity?	Identify EVs and confounds Explain how you will prevent them affecting the study's outcome
<b>Sample</b>	Who will you use in your study?	Sample size and composition Target population Sampling technique and procedure (opportunity, systematic, stratified, random)
<b>Ethics</b>	How will you ensure that PPs are treated correctly?	Informed consent; deception; risk of harm; privacy; confidentiality; PPs' rights

## Some possible research questions

- Does problem solving ability change with age?
- Does being a victim of crime change people's attitudes towards the criminal justice system?
- Does being good at Maths make you good at Science?
- Are there gender differences in people's emotional responses to violence?
- Does a person's mood influence how generous she or he is?

## Exercises to improve your skills:

1. Choose and justify a research design & method for each of these research questions.
2. Choose a different design/method for each, explaining why it would be a better choice.
3. Where you have chosen a questionnaire, explain how you would construct it.
4. Choose one study and write a briefing script for obtaining informed consent from the PPs.
5. Choose one study and write a debriefing to use with the PPs after the study is complete.