

RESEARCH METHODS I

CONDUCTING RESEARCH IN PSYCHOLOGY:
DEVELOPING MATERIALS AND COLLECTING DATA

CONDUCTING RESEARCH: DEVELOPING MATERIALS AND COLLECTING DATA

1. Find an idea from the literature
2. Convert into a specific hypothesis
3. Define and measure variables
4. Identify participants
5. Select a strategy and design
6. Conduct study
7. Analyse and Evaluate data
8. Report findings
9. Refine or reformulate hypotheses/theory



DEFINING AND MEASURING VARIABLES

- Specifying precisely what we aim to measure
- Establishing operational definitions
- What type of data will we collect from the variables being measured
- Please click on the Microsoft Forms link in the chat to complete the operational definitions task:
- <https://forms.office.com/Pages/ResponsePage.aspx?id=-REPTm4EBUVWcuNshUjEelQETBEPMnrNEjphOOldjNfdUMFJKU0xQSkdVVzhTSVUzSFkxMzNUUVhRWS4u>

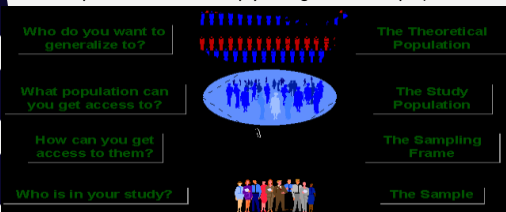
Data gathering techniques

The term "nomothetic" comes from the Greek word "nomos" meaning "law". Psychologists who adopt this approach are mainly concerned with studying what we share/have in common with others. That is to say in establishing laws or generalizations.

The term "idiographic" comes from the Greek word "idios" meaning "own" or "private". Psychologists interested in this aspect of experience want to discover what makes each of us unique/individual.

In nomothetic techniques it is important that the group of people who are being studied are reasonably typical of other people too. This brings us to the importance of SAMPLING...

Sampling is the process of collecting the set of research participants who will provide the data for a psychological research project.

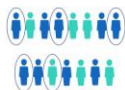


Sampling is the process of selecting observations (a sample) to provide an adequate description and robust inferences of the population

The sample is **representative** of the population.

PROBABILITY SAMPLING METHODS

Simple random sample



Systematic sample



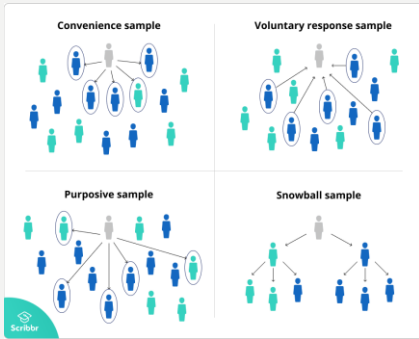
Stratified sample



Cluster sample



NON-PROBABILITY SAMPLING METHODS



PLEASE CLICK ON THE LINK IN THE CHAT TO GO TO THE MICROSOFT FORMS QUIZ ON SAMPLING

- <https://forms.office.com/Pages/ResponsePage.aspx?id=-REPTm4EBUWcuNshUjEelQETBEPmnrNEjphOOldjNfdURTBjT05UNFVjQUpWVldSUE9ZWVQ2Tlg3SC4u>

SELECTING A STRATEGY AND DESIGN

- Should follow appropriately from the research question and hypothesis
 - Need to consider what it is you want to find out
- Design:
 - Qual/Quant, Exp./Non-exp., observation, questionnaire, etc.
 - Within vs. between
 - What and how many IVs
 - What and how many levels of the IV
- Based upon prior literature

CROSS-SECTIONAL STUDY

compares different population groups at a single point in time (snapshot)

Allows us to compare many different variables at the same time.

Findings are drawn from whatever fits into the frame.

However, cross-sectional studies may not provide definite information about cause-and-effect relationships – snapshot - do not consider what happens before or after the snapshot is taken.

E.g., cholesterol levels in daily walkers - compare the cholesterol levels among non-walkers. We might even create subgroups for gender.

However, we would not consider past or future cholesterol levels, for these would fall outside the frame. We would look only at cholesterol levels at one point in time.

LONGITUDINAL STUDY

Researchers conduct several observations of the same subjects over a period of time, sometimes lasting many years.

Detect developments or changes in the characteristics of the target population at both the group and the individual level - extend beyond a single moment in time.

Costly

E.g., the change in cholesterol levels among women who walk daily for a period of 20 years. The longitudinal study design would account for cholesterol levels at the onset of a walking regime and as the walking behaviour continued over time.

More likely to suggest cause-and-effect relationships than a cross-sectional study by virtue of its scope.

DESIGN KEY MATERIALS

- Information sheet
- Consent form
- Debrief sheet
- Demographics form
- Stimuli you will use with participants
 - Pictures, words, etc.
- Gather validated questionnaires
 - Create questionnaires if necessary
- Design interview questions
- Etc.

PLEASE CLICK ON THE LINK IN THE CHAT TO GO TO THE MICROSOFT FORMS QUIZ ON RESEARCH DESIGN

- <https://forms.office.com/Pages/ResponsePage.aspx?id=-REPTm4EBUWcuNshUjEelQETBEPmnrNEjphOOIdjNfdUNTg2QVpKNE8wUE5CTTM0RVMxU1IkyM1VJUi4u>

CONDUCTING THE STUDY

- **Before any research can begin, it must have ethical approval**
 - Department/Faculty/University Ethics
 - NHS Ethics
 - Organisational letter of support
 - Do you need a CRB check if researching children/vulnerable adults?
- The materials you intend to use with participants will also need to be reviewed to ensure they are appropriate
- When conducting the research, need to abide by what is documented in the approved ethics form
- Need to behave professionally and be courteous towards participants

CONDUCTING THE STUDY

- If the study is being conducted online, need to ensure any technical issues are dealt with prior to participants taking part.
- If the study is being conducted in the lab, need to ensure you have booked out a room (don't want other people walking in half way through).
- Need to develop a research protocol
 - Set of instructions that enables the exact same procedure to be followed with all participants.
 - Need to turn up prepared (have all materials printed and set out ready)
 - Need a system for efficiently dealing with the data coming in from participants.
- Need to develop a set of standardised instructions/information to give all participants

CONDUCTING THE STUDY

- Recruitment and Data Collection will ALWAYS take longer than anticipated!!
 - This should be factor into your timetable when running a study!
- Be prepared for things to go wrong!!
- Try to anticipate and think through what could go wrong in advance....

Piloting of full procedures must be conducted prior to starting the research and must be reported

BPS ETHICAL GUIDELINES: NINE MAJOR PRINCIPLES



INFORMED CONSENT



Informed on:

- Must occur at the beginning of the study
- What will be required/expected
- Purpose of research
- Rights (confidentiality, withdrawal, etc.)

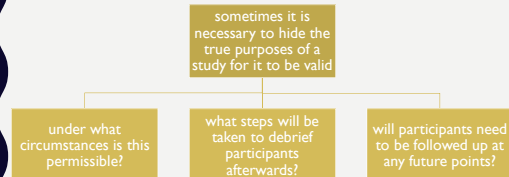
Issues to consider

- Children and learning impaired
- Retrospective; in public domain
- Presumptive consent
- Prior general consent
- Cannot Withhold data (damage done)

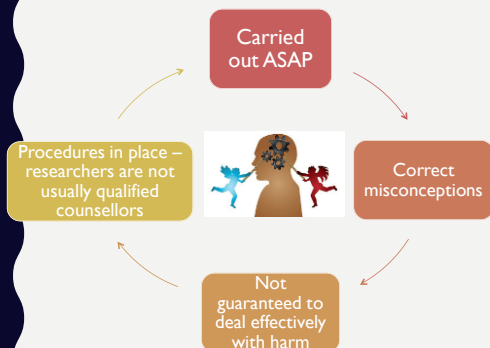
Research Ethics: deception



Use of deception



Research Ethics: debriefing



DATA PROTECTION AND PRIVACY



Do not record real names of participants, use numbers or pseudonyms

Do not observe anyone without their informed consent unless in a public space

Not always acceptable to observe in a public space, e.g. lovers on a park bench

Must keep any paper records secure in locked cabinets

Must keep electronic information secure: encrypted, password protected

Must not store consent forms and data together – these should be kept separate

PROTECTION FROM HARM



Physical Harm:

- e.g., anxiety, seizures, sweating, etc.

Psychological Harm:

- Psychological safety
- Confidentiality
- Privacy (observing in public or private places)

RIGHT TO WITHDRAW

Withdraw



Participants have the right to withdraw at any time during the study **WITHOUT PENALTY**

Participants may feel they should not withdraw because it will spoil the study

ETHICS FOR STUDENTS

You must talk through ethical considerations with your supervisor

Include the **forms** as **appendices**

Include discussion of ethics in your research reports

Discuss the **forms** you use in your **methodology** and link to appendices

Ensure you use, **consent forms** etc.
