

Session 5

Data, Samples and Populations

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Skills of Finding and Researching Information

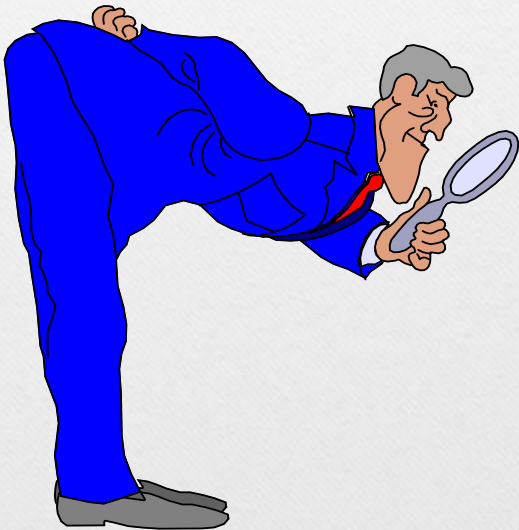
- Card Index
- Referencing
- Articles in journals
- Note taking
- Categorisation of evidence
- Noting quotations

Assess the Quality of a Given Research Article

- Sceptical

- The article needs to convince you!

- What have you learned?

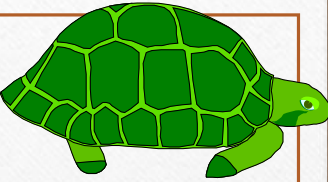
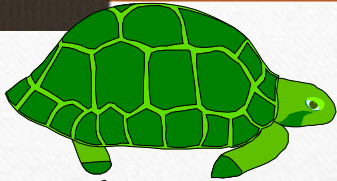


What is Important?

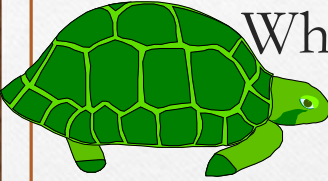
- It is important to carry out a critical analysis of a text. This requires careful reading and reflection informed by critical questions:
- Use the following questions to analysis the article

Questions to Ask

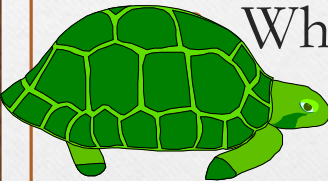
- What is being claimed?
- How far is there backing for the claims?
- How adequate is any conceptual or theoretical orientation to back the claims?
- How far does any value stance adopted affect the claims?
- How far are claims supported or challenged by others' work?
- Summary Evaluation



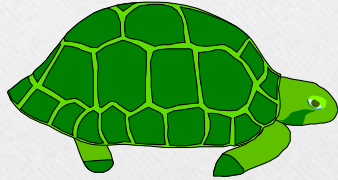
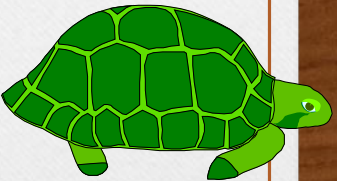
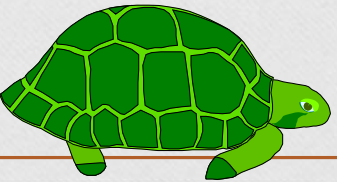
Sampling



What is sampling?



Why do we use it?

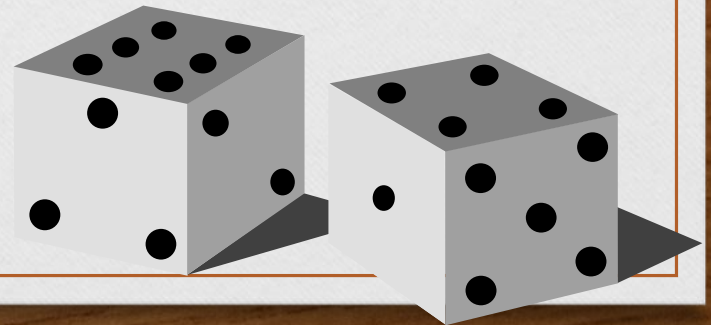
- Statistical techniques can help us generalise from our sample back to our previously defined population
- 
- 
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Population

- Define the population:
 - population is everyone or everything we are interested in studying.
 - individuals
 - educational institutions
 - examination papers

Who are the Members of Your Population?

- Which members are 'under represented'?
- Sample Frame
 - Those selected, at random, from your population
- Random sampling is ideal



The Size of the Sample

- General rule: have a large a sample as possible



Important Elements in a Study

- Size of the phenomenon you are studying
- Variability of the phenomenon
- Power of the statistical test
- Sample size
- Selecting a large sample is therefore the only chance you have to influence directly your chances of success

Selecting the Sample

- Random Sampling
- Stratified Sampling
- Systematic Sampling

Non-Response

- You must record the non-response rate for each questionnaire item as well as overall.
- Non-response can lead to bias in the results

Data



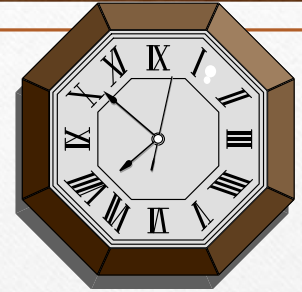
- Nominal data
- Ordinal data
- Interval data
- Ratio data
- Discrete data
- Continuous data

Different Types of Data

- http://www.youtube.com/watch?feature=player_detailpage&v=hZxnzfnt5v8
- Video

Which Statistical Test?

- http://www.youtube.com/watch?feature=player_detailpage&v=rulIUAN0U3w
- Video



Types of Research

- Case Studies
- Correlational Research
- Surveys
- Longitudinal Study
- Cross-sectional Study
- Action Research
- Participatory Research

