www.ePsychVCE.com

Steps in Psychological Research

1: identify the research problem

2: research hypothesis

A statement of the predicted effect of a change in the IV on the value of the DV

Contains

Prediction

Population

DV — A variable which measures the effect of manipulation of the IV

IV — A variable manipulated to test the effect on the DV

3: Design method

Repeated-measures

Matched-pairs

Independent-groups

Sampling

Stratified random

Stratified

Convenience

Random

4: Data collection

Observational studies

Quantitative data

Self reports

Qualitative data

Case studies

Interviews

Surveys

5: Data analysis

Descriptive statistics

Measures of central tendency

Mean

Median

Mode

6: Data interpretation

Merely summarise, organise & describe data (no statistical conclusions can be made)

Use p value (p = probability) to make statistical inferences i.e. determine statistical significance

A p value of 0.05 means there is a 5% chance that results are due to chance factors. In VCE Psych we accept a 5% confidence interval in determining statistical significance

CONCLUSION
If calculated p value < 0.05
Results are significant (support the hypothesis)
NOTE: a conclusion relates to the sample only

CONCLUSION
If calculated p value > 0.05
Results are due to chance (reject the hypothesis)

GENERALISATION
Is a judgement about the extent to which the findings can be applied to the wider population

7: Report findings

Code of ethics

Voluntary participation

Withdrawal rights

Informed consent

Participants rights

Deception

Debriefing

Confidentiality

Established to Protect the rights & welfare of participant and ensure research is conducted for the benefit of the community

A variable other than the IV that MAY affect the DV at a random point in the experiment

Identify outside variables

Extraneous variables

Confounding variables

A variable other than the IV that HAS SYSTEMATICALLY affected the DV throughout the experiment

Experimenter effect

Placebo effect

Order effect

The order that a repeated measures design affects the results

Actions of experimenter affect the results

Expectations of participants affect their behaviour hence results

Overcome by counterbalancing

Overcome by using a double-blind procedure

Overcome by using a single-blind procedure