

Research Methods

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Designing Psychological Investigations



Teacher's Workbook Checklist	
Date	
There are no gaps in workbook; all activities/ boxes are complete	
All AO3 points are well explained and written in full sentences (50-100 words for each point)	

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Selecting Research Methods

<i>Is the aim of the research to collective descriptive data or to investigate links between variables?</i>			
<i>Do you want to study the behaviour of groups or individuals?</i>		<i>What sort of links – relational or causal</i>	
Groups?	Individuals? CASE STUDY	Relational? CORRELATIONAL ANALYSIS	Causal? EXPERIMENT
<i>Do you need a large sample or more detailed data from individuals?</i>		<i>Do you want to get information by asking for responses or by watching behaviour?</i>	
Detail? INTERVIEW	Large scale? SURVEY	Observing? OBSERVATION	

Experimental Design

The way in which Ps are used in experiments

<u>Experimental design</u>	<u>Outline</u>	<u>Evaluation</u>
Independent group design		
Repeated Measures design		
Matched pairs design		

Sampling

Method used to select Ps from target population

All samples must be representative of the target population to be considered valid- high population validity

Sampling technique	Outline	Evaluation
Random sampling		The most representative type of sampling and therefore has the greatest population validity.
Systematic sample		
Stratified sample		
Opportunity sample		
Volunteer sample		

Correlational Analysis

- Relationship between two co-variables
- Measures strength and direction of an association between two co-variables
- The strength of this correlation is expressed by the correlation coefficient.
 - The correlation coefficient is always between +1 and -1.
 - +1 represents a perfect positive correlation
 - -1 represents a perfect negative correlation.
 - A correlation coefficient of 0 means that there is no correlation between the two variables
- Correlations are plotted on a scattergram

Positive correlation

Sketch a positive correlation

Negative correlation

Sketch a negative correlation

Case study/ studies

Detailed study of a single individual , institution or event, c

Strengths	Limitations
<ul style="list-style-type: none">• Provides a rich source of meaningful data.• Some this detailed data can challenge established theories. <p>Eg/ Case study of KF challenged the idea that short-term memory was a single unitary store. His short-term memory was damaged but it was selective; he found it hard to recall verbal material but could recall visual stimuli (Shallice and Warrington, 1970).</p>	<ul style="list-style-type: none">• Difficult to generalise the results – they have low population validity.• Difficult to replicate case studies so it is hard to examine the reliability of the findings.

Ethical Issues

- All psychological research must conform to the highest ethical standards.
- Many ethical issues can be avoided by using a good information sheet and consent form. This allows participants to give informed consent.
- Information sheets should also inform participants about their right to withdraw at any point and of their right to confidentiality.
- Research with children requires consent from parents or guardians.
- Deception should be avoided whenever possible. When it is used researchers should seek prior general consent or retrospective informed consent.
- Participants should be debriefed after a study.
- Researchers should protect participants from physical or psychological harm throughout the study

Informed Consent	<u>Description</u>	<u>How to overcome</u>
Deception		
Right to withdraw		
Protection from harm		
Privacy and Confidentiality		

Analysing and Interpreting Qualitative Data:

**Content
analysis**

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Strengths

Limitations

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**Thematic
analysis**

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Strengths

Limitations

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Reliability and Validity (Read the printed/ scanned copy of Yr 2TB)

Reliability	Consistency/ Same similarity			
	Internal reliability		External reliability	
	Internal reliability is usually associated with measures such as attitude scales or psychometric measures, for example personality tests. It is concerned with the consistency within a test.		External reliability is the ability to produce the same results every time the test is carried out.	
	Assessing reliability		Improving reliability	
	Split half method	This compares one half of the test with the other to check whether the scores of a variable (eg/extroversion) are consistent.	Qualitative methods	
	Inter-observer reliability		Questionnaires	
			Observations	
Test-retest		Experiments		

Validity	Accuracy			
	The extent to which what you are measuring is accurate			
	Internal validity		External Validity	
	The controlling of ALL variables, except the one being deliberately manipulated by the researcher. Essentially, does the DV measure what we want it to and, in an experiment; are we measuring the effects of the IV on the DV?		Concerned with how well the results of a study can be generalised beyond the study itself.	
			Ecological validity	
			Population validity	
			Mundane realism	The degree to which the setting or procedure reflects that in real life.
			Experimental realism	The degree to which the results reflects realistic behaviour
	Assessing		Improving	
	Face validity		Questionnaires	
Interviews				
Concurrent validity		Experiments	s	
		Observations		
Temporal validity				