Questionnaires

A self-report method

Question Types:

Closed Questions

- have preset, fixed answers
- quantative data obtained (numerical)
- limited info given to be analysed

Attitude Scales

eg. Likert scale

- fixed set of choices to rate agreement to statement
- each preference should be given a weighting

Open Questions

- respondents answer freely
- more time + effort for participant
- obtain qualitative data (non-numerical)
  ↳ subjective interpretation

Issues:

Social Desirability:

- respondent gives a favourable answer (not genuine)
  ↳ desirable according to social norm
- v problematic for research on socially sensitive issue
- many questionnaires have built-in lie detectors
  ↳ if too many answered in a socially desirable way they are excluded.

Question Construction:

- not technical, ambiguous or complex
- dont lead or mislead

- dont ask personal qs → violate right to privacy
- Likert scale - no. of options.
  ↳ if odd, middle selected a lot
- Response bias (Likert)
  ↳ all statements same view Ps just slip into agreeing or disagreeing with all
  ↳ reverse + mix up to avoid

Reliability

↳ consistency of a measure or finding

- external → consistency of M or F over time
- internal → consistency of an M within itself.
- lose external reliability if Ps repeat on diff. occasions
- ↳ check using test-retest method (do again @ diff time - if similar ans. = ex. reliability)
- internal reliability prob when diff qs assess same trait - do they equally measure the same concept?
  ↳ check using split-half method (split q in half + compare - if same score on each half = measuring same conc.)

Validity

↳ is it measuring what it intends to measure?

- look at q and decide if it makes sense & in terms of what is being measured - face validity
- able to accurately predict same construct in the future - predictive validity
- compare qs to another test measuring the same construct - concurrent validity

Interviews

Structured

- defined by nature of questions
- standardised - all Ps asked same qs in same way
- usually closed questions (quantitative)
- data can be superficial and lack depth

Semi-Structured

- more conversational and dynamic
- set of qs they aim to be answered
- can gather both quantative + qualitative data

Unstructured Interview

- loose research aim
- gathers qualitative data
- interviewer needs to be analytical during
  - skilled @ achieving good rapport
  - have good listening skills
  - use non-judgemental lang
- ethical issues are critical!
  - ↳ details anonymised + personal details disguised
- researcher deal sensitively when asking for personal info - may breech right to privacy

Researcher Effects

- sex, age, personality + manner can affect whether they are truthful or answer info at all
- predict characteristics that may affect + control them!

Sampling

Aim: select a representative sample

Random Sampling

- everyone has an equal chance of being selected
- should result in a representative sample
- need consent from every participant - if not all consent can be unrepresentative

Stratified Sampling

- use if pop. has salient characteristics that need to be proportionately represented
- each sub-group can be randomly sampled

Opportunity Sampling

- makes use of Ps who are available
- researcher has limited control over who is recruited
- not everyone has an equal chance of being selected

Volunteer Sampling

- self-selected participants
- place advert
- researcher has no control over who volunteers
- a certain type of person may volunteer → sample bias
- researcher may pre-test volunteers - exclude unrepresentative characteristics

Analysis of Quantitative Data

Tables
- raw data
- frequency

Measures of Central Tendency → descriptive

Mean
- add up all values and diviving by no. of data
- most sensitive + most powerful measure
  ↳ all scores are used in calculation
- can be affected by extreme values
- often used on interval/ratio level data (equal distances between each score eg. time + height)

Median
- middle value when placed in order
- not affected by extreme values
- less sensitive than mean
- typically used on ordinal data (numbers are rankings other than scores)

Mode
- most frequent score in a data set
- 2 most frequent = bi-modal
  ↳ meaningless
- used on nominal data (forms discrete categories eg. hair colour)
- not affected by extreme values

Measures of Dispersion → descriptive

Range
- difference between highest and lowest

- affected by extreme values
- use IQR if there are extreme values

Standard Deviation

- distance of each value from the mean

$$\sqrt{\frac{\Sigma(x-\bar{x})^2}{n-1}} \quad \text{or} \quad \sqrt{\frac{\Sigma x^2}{n} - \left(\frac{\Sigma x}{n}\right)^2}$$

↑ mean²

Graphs

Bar Charts

- present data from a categorical variable (discrete)

Histogram

- illustrate freq. of values in a data set
- represents continuous data

Ethical Guidelines

Codes of conduct are used to regulate psychological research with humans and animals

In the UK, research is regulated by the British Psychological Society (BPS)

The purpose:
- ensure safety and well-being of participants
- ensure that standards, professionalism and reputation of the subject are upheld

BPS ethical code is based on 4 principles:

Respect
- psychologists to respect dignity of all individ.
- respect privacy and confidentiality
- seek to gain informed consent, avoiding deception
- offer right to withdraw without consequence

Competence
- level of professionalism
- should be fully aware of ethical code
- monitor own knowledge
- recognise their limits + limits of the research.

Responsibility
- to Ps, general public, profession and science
- doesn't harm others or result in misuse
- have RAW and shouldn't be incentivised
- debrief should be given

integrity

- honest + fair
- avoid exploiting Ps (or how it looks to public)
- avoid interests that conflict Ps interests

Can	Confidentiality
Do	Deception
Can't	Consent (informed)
Do	Debrief
With	Withdraw (Right to)
Participants	Protection / Privacy

Confidentiality → can't be identified
Deception → lied to about nature of study?
Informed Consent → fully aware of the study's aims
Debrief → told nature @ end. deception disclosed
Right to withdraw → can leave during/after (data)
Protection → physical/psychological harm + feelings
Privacy → not involve if gathers info wouldn't disclose

Analysis of Qualitative Data

Thematic Analysis

- recording themes, patterns or trends within data
- inductive approach
  - use known facts to produce general principles
  - read + reread → themes emerge
  - researcher DOESN'T impose own ideas / expectation
- deductive approach
  - researcher specifies themes that they will look for before analysing
  - using knowledge/info you have in order to understand something
- very flexible
- develop themes into 'codes' - represent categories of themes
- considered unscientific - themes dependent on subjective opinion of researcher
- can lead to researcher bias (based on expectations)
- more detailed + meaningful info than quantitative

Experiments

Laboratory Experiments
- controlled environment

Field Experiments
- setting where behaviour being studied would naturally occur
- everyday context.

Features of Experiments:
- variable manipulated/altered
- effect can be measured
- maintain control over other variables
- set up situation where Ps perform a task
- performance of task is measured.

Experimental Method
Theory proposed
↓
Hypothesis made based on theory
↓
variable Manipulated (IV)
↓
Performance measured (DV)
↓
Theory supported or refuted according to outcome

Hypotheses

Experimental / Alternative Hypothesis

- clear + precise statement predicting the results of the experiment
- contain variables under investigation
- they are the same thing!
  - ↳ experimental - when its an experiment
    alternative - when its not an experiment

Directional / One-tailed

- direction of results can be predicted
- strong evidence / previous research can suggest direction

Non-Directional / Two-tailed

- change or difference is predicted but not direction

NULL Hypothesis

- default prediction
- any difference is due to chance
- sometimes difference is too insignificant

There will be no difference in IV on DV. Any difference found will be due to chance factors

Variables

Independent Variable

- manipulated / changed by researcher
  - ↳ demonstrate difference between experimental conditions

Dependent Variable

- measured
- affected by the change of the IV

Operationalisation

- elaborating what the variables are and how they will be measured
- increases objectivity of the research
- can assess whether research is valid

Extraneous variables

- factors that may have an unwanted effect on DV

Confounding variables

- extraneous variable influences DV and makes it looks as if the IV creates the effect (this is a confounding variable)
- or it confounds the results so you are not measuring the IV + DV

Situational Variables

- type of extraneous + confounding
- lighting, noise, temperature, time of day etc
- ↑ should be controlled or eliminated
- controlling → held constant for all Ps
- eliminating → preventing from occurring

Participant Variables

- type of extraneous + confounding
- motivation, personality, intelligence, age etc.

can't control all situational + participant variables

↓

only control those that will affect performance

-ity

Objectivity

↓

need to be impartial and judgement free

- important that dependent variable is measured objectively
- cognitive studies concepts that can't be directly observed/measured BUT can objectively observe data from experiments + neuroimaging

Reliability

↓

consistency of findings from research

- important criteria for being scientific.
- For experiments, test-retest reliability is important

⇓

If reliable, same result again + again; it will be replicable.
Needs tight control of extraneous variables.

Validity

↓

Whether its measuring the behaviour/construct it intends to.

Internal → how well causal relationship established
→ whether been confounded by extraneous
→ ensure by using standardised procedures
→ asess by examining construct validity

↓

how well the measure is a useful indicator.
→ asess by examining predictive validity

↓

how well the performance on the measure can predict future events

External → how well research findings can be generalised

→ ecological validity

↓

how well can be generalised to other situations eg. real life/everyday

→ population validity

↓

how well findings can apply to other populations.

→ ensure sample is representative

→ ensure context as realistic as possible

Control Issues

Experimenter Effects

↓

the way an experimenter may influence outcome.

- subtle cues can influence (eg. Milgram verbal prods?)
- can be more obvious eg. Female asking male about views of gender equality.

↓

gender/age ~~and~~ can be big influences.

- Hawthorne effect is where the mere presence of a researcher can affect performance
- Experimenter effects can explain why a researcher finds a result that others fail to replicate.

Demand Characteristics

↓

Effect of experimenter causes Ps to alter their behaviour to meet (real or perceived) expectations

- Rosenthal researched

Experimental Design

First,
- operationalise the IV
- find levels/diff conditions eg. volume
- have a control group

Independent Groups
- different people in each condition
- Ps are less likely to guess the aim (don't know about other conditions)
  ↳ demand characteristics + order effects reduced
- BUT will be individual differences + participant variables between groups
  ↳ prevent by random allocation

Repeated Measures
- all participants take part in all conditions
- reduces individual differences + participant variables
- less Ps needed - more economical
- demand characteristics + order effects increased
  ↳ practice + fatigue

Single-blind Technique
- controls effect of demand characteristics

Randomisation
- controls order effects
- select at random which condition a participant does first
- eg. cards out of a hat

Counterbalancing

- Ps placed into a group that does A then B or B then A BUT if order effects are not equivalent more complex counterbalancing is needed
- ABBA balances unsymmetrical order effects (do each condition twice the take mean of A + B)

Latin Square

- if more than 2 conditions
- designates Ps to combinations of ordering

Matched Pairs

- diff Ps assigned to each condition but matched based on characteristics important to the study
- characteristics established by pre-testing + researching lives + backgrounds of Ps
- time-consuming
- Ps have to be excluded because they don't match
- conditions can be compared more reliably
- difficult to match on characteristics that effect the DV

Inferential Statistics

- Test of significance tells us if there was a real effect of IV on DV - could be due to chance
- Rest on concept of probability (of data being due to random chance factors)
- In psychology we use $P<0.05$ => 5% probability of results being due to chance

Type I Error is when the level of significance is too lenient (p is too big eg. 0.1) so alternative accepted + null rejected when the effect was not real

Type II Error is when the level of significance is too stringent (p is too small eg. 0.01) so alternative rejected + null accepted when there was actually an effect

The test used depends on:
- difference/relationship
- experimental design (related/unrelated)
- type of data (nominal/ordinal/interval)

Types of data:
Nominal → categorical
→ most basic (only freq)
Ordinal → ranked in order/position
→ usually derived from arbitary scales
? → know who came 1st etc but not what they got
Interval → know difference between each value

Wilcoxon Signed Ranks

Used as a test when...
finding a difference
data is ordinal
design is related (repeated measures/matched p)

How to calculate:

1) Calculate difference between each Ps score for each condition (+/- MATTERS)
2) Rank the differences (ignore +/-)
3) Sum the ranks for +ive then -ive differences
4) Smaller from 3) is the T value
5) Look up T value in critical value table

Ps No.	condition 1 words from categorised A	condition 2 words from non-categorised B	Difference B-A	Rank
N=10				
1	8	11	3	4
2	7	7	0	
3	9	16	7	6
4	11	12	1	1.5
5	13	18	5	5
6	9	8	-1	1.5
7	8	16	8	7
8	5	17	12	9
9	13	11	-2	3
10	6	17	11	8

Sum of pos dif ranks: $4+6+1.5+5+7+9+8 = 40.5$
Sum of neg dif ranks: $1.5+3 = 4.5$
so our T value = 4.5

↓

Look up in critical values table.

Mann-Whitney U Test.

Used as a test when...
finding a difference
data is ordinal
design is unrelated (independent groups)

How to calculate:
1) Rank data as if one whole set
2) Add ranks as 2 separate sets
3) Use formulae (R_A/R_B = sum of ranks)
4) Look up smaller U value in critical values table

Words recalled from categorised (A)	Rank	Words recalled from non-categorised (B)	Rank
8	6	11	11
7	3.5	7	3.5
9	8.5	16	16.5
11	11	12	13
13	14.5	18	20
9	8.5	8	6
8	6	16	16.5
5	1	17	18.5
13	14.5	11	11
6	2	17	18.5
Sum of ranks	75.5	Sum of ranks	134.5

Formulae:

$U_A = n_A n_B + \frac{n_A(n_A+1)}{2} - \Sigma R_A$ $\quad U_A = 10\times10 + \frac{10(10+1)}{2} - 75.5$

$= 79.5$

$U_B = n_A n_B + \frac{n_B(n_B+1)}{2} - \Sigma R_B$ $\quad U_B = 10\times10 + \frac{10(10+1)}{2} - 134.5$

$= 20.5$

$U = 20.5 \rightarrow$ look up in critical values.

Case Studies

Henry Molaison (HM)

- Suffered brain injury as a result of a procedure to relieve him from epileptic seizures
  ↓
  The hippocampus (in the temporal lobe) was removed when he was 27 by William Scoville
  ↓
  Seizures stopped but left with severe memory loss

- Hippocampus was known to be associated with consolidating memories

- HM was ideal because his injury was specifically localised + his personality and intelligence were virtually intact

- HM had anterograde and retrograde amnesia
  ↓ ↓ ↳ might not be due to procedure
  can't form memories can't recall memories
  BUT he did learn new skills

Qualitative Data:
case studies usually give qualitative data eg. describing what functioning is intact/lost

- requires interpretation → subjective
- detailed accounts of experiences, feelings + beliefs
- inductive process → question proposed + answer emerges

- idiographic → no general rules, specific to each individual

Evaluation:

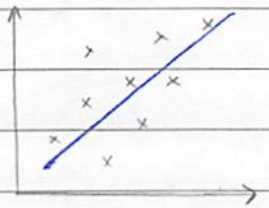
- laborious + difficult to conduct → transcribe → analyse
- unscientific
- highly subjective
- descriptive rather than explanatory method
- important when understanding important issues
  ↳ can't just give questionnaires

Correlational Research

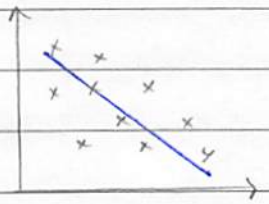
↓

measure 2 variables to see if related
(co-variables)

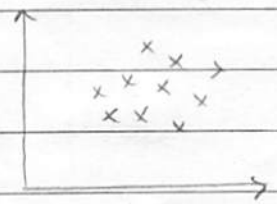
- does NOT tell you cause + effect
- plot data on a scatter diagram



positive correlation



negative correlation



no correlation

Evaluation:

- can't tell cause and effect
  ↳ could be coincidental
- unable to tell if there's a 3rd factor
  ↳ sunshine + ice cream example! → in psych could be that they share same experiences etc
- sometimes use secondary data to see if more expensive research will get useful results
  ↳ cost-effective!

Spearman's Rho

Used as a test when...
finding a relationship
data is ordinal

How to calculate:
1) Rank each variable separately
2) Work out the difference between the ranks
3) Square the differences
4) Use formula
5) Look up in critical values table

Ps	Hours of Revision	Rank	Raw Mark	Rank	d	d^2
1	4	4	14	5	-1	1
2	2	7	11	7	0	0
3	1	9	8	8	1	1
4	3	6	7	9.5	-3.5	12.25
5	4	4	17	3	1	1
6	5	2	20	1	1	1
7	1	9	7	9.5	-0.5	0.25
8	1	9	12	6	3	9
9	6	1	18	2	-1	1
10	4	4	15	4	0	0

Formula:

$$r_s = 1 - \frac{6\Sigma d^2}{n(n^2-1)} \qquad r_s = 1 - \frac{6 \times 26.5}{10(10^2-1)} \qquad r_s = 0.839$$

⚠ · greater the sample → more likely to be significant

Brain Scanning

CAT Scans

computerised axial tomography scans

- ANY part of the body
- multiple x ray beams are passed around the head from different angles.
- info from x rays interpreted by computer
- structure of brain can be seen BUT no info about functioning

- exposure to radiation (benefits need to outweigh risk)
- can remove need for exploratory surgery
- can harm unborn baby
- quick to conduct
- accurate details of brain structure
- can help plan a procedure before surgery

PET Scans

positron emission tomography scans

- nuclear medicine procedure - inject patient with a small amount of radioactive substance (FDG)
- radioactive atom is attached to glucose as brain uses glucose for energy
- as glucose is used ra atoms break down and release positrons - gamma rays are produced
  ↳ scanner picks up
- HIGH activity = red | LOW activity = blue
- show areas that aren't functioning properly (eg. due to a tumor or damage)
- can predict what issues they may face

- more invasive than others
- unclear if long-term effects

fMRI Scans

functional magnetic resonance imaging scans

- NO radiation
- idea: brain activity is associated w/ bloodflow
- head placed in v large, v powerful electromagnet
- nuclei in hydrogen molecules in water align w/ direction of magnetic field
- high activity: oxygen carried to haemoglobin in red blood cells
- if haemoglobin carries oxygen its diamagnetic (repels)
- if haemoglobin is deoxygenated it paramagnetic (follows direction)

↑

scanner detects these changes to create image

- some people unable (pacemaker etc.)
- non-invasive
- claustrophic/loud noises become stressed

Studying human behaviour

- Raine et al (1997) → PET
  → map abnormal activity in areas linked to risk-taking / impulsivity
- used to make links between structure + activity

Twin and Adoption Studies

Twin Studies

- unique design to test nature/nurture on human behav.
- monozygotic - share 100% of genetic material
  dizygotic - share 50% of genetic material
- compare behaviour between mono + di and see who shares most similarity
- concordance rate → extent to which behaviour is the same between twins

Gottesman and Shields (1966)

- studied twins over 16yrs
- 1 twin diagnosed w/ schizophrenia
- Mono → 42% of co-twins also diagnosed
- Di → only 9% of co-twins also diagnosed
- suggests GENETIC reason for developing schizophrenia

Adoption Studies

- best method to see if behaviour is nature/nurture
- adoptees studied + behaviour correlated with natural and adoptive family
  ↳ genes ↳ environment

Cadoret and Stewart (1991)

- boys at increased risk of ADHD if dad convicted of crime + aggression
- BUT also if psychiatric problems in adoptive family members.
- aggression has variety of causes, neither nature/nurture

Evaluation

- virtually impossible to separate nature completely from nurture
- child could spend time in foster care - confounding variable - affects validity

- almost all twins raised together (MZ concordance could be due to enviro. not just genes)
- sample sizes can be limited - can't generalise
- adopted children usually placed w/ family of similar background

Observational Research

Types of Observation

Naturalistic - Ps own environment

Structured - Researcher has some control
- observe behav. that can't in naturalistic
- numerical data generated
- subjective → need 1+ observers
- more reliable
- replicability = coding systems

Non-participant - observer not part of situation

Participant - observer is also a participant
- doesn't affect behaviour of Ps
- reveals data missed by other methods
- hard to record notes

Overt - Ps are aware they are being observed
- informed consent can be obtained
- informed of R2W

Covert - Ps not aware they are being observed
- more unethical (see above)
- unlikely to change behaviour = more valid

Data Collection

Quantitative	Qualitative
• tallying	• notes • audio/video recordings

Categories need to be clear and unambiguous
Large studies - observers need training

Sampling

time sampling eg. every 30secs → behaviours can be missed
↳ unrepresentative

event sampling recording certain behav. every time
↳ eg. ticking box
↳ can't record all instances

Content Analysis

Research tool for analysing content of texts, images for certain words/concepts

Categories should be determined in advance

Go through material and tally/count the number of times each category occurs

Qualitative analysis may be used to examine the meaning and relationship of words

Vital that it is coded to clear and manageable categories for appropriate conclusions to be made

Evaluation

- unobtrusive → rarely ethical issues
- confidentiality should be maintained even if existing sources are used
- fresh interpretation of existing data
- can analyse historical material + document trends over time
- assess reliability as can be replicated by using same categories
- subjective + biased
- potential issues w/ internal validity
- purely descriptive
- trends may not accurately reflect reality

Animal Research

Arguments For

- smaller gestation period
- internal validity - unlikely to show demand characteristics
- higher degree of control (can cage)
- pain and distress is permitted (skinner box)
- significant insight into areas of medical research brain + nervous system
- share common ancestry → valid info
- justified as helps a lot of people

Arguments Against

- not credible
- lacks ecological validity
- too many differences between animals + humans
  ↳ generalisations that are wrong are known as anthropomorphism
- different brains physiologically (we have larger)
- benefits not known until after - could be pointless
- if animals so similar, we should have same rights?
- speciesism - are we better than animals?

Ethical Issues

- protected animals = non-human vertebrates + octopi
- permission will not be granted if researcher can't justify costs to animal in relation to the likely benefits of the research
- researcher requested to show consideration to the 3 Rs.

Refinement - refine procedures to minimise suffering
Reduction - reduce number of animals used

Replacement - replace with non-sentient beings where possible

↓

eg. computer-imaging
cell cultures

- all animal research must be licensed

↓

specifies species + no. of animals

- any adverse effects must be recognised + assessed

Chi-Squared Test

Used as a test when...
finding a difference
data is nominal
design is independent measures

How to calculate:
1) Put data in contingency table (see below)
2) Calculate expected ~~freq~~ value, for each cell
3) Subtract expected value (E) from observed value (O)
4) For each cell $(O-E)^2$
5) For each cell $\frac{(O-E)^2}{E}$
6) Add up all $\frac{(O-E)^2}{E}$
7) Calculate degrees of freedom

	Stereotypical Toy	Non-stereotypical Toy	Total
Girls	8 (A)	12 (B)	20
Boys	17 (C)	3 (D)	20
Total	25	15	40

Expected values: $E = \frac{\text{row total} \times \text{column total}}{\text{overall total}}$

A: $\frac{20 \times 25}{40} = 12.5$ B = 7.5 C = 12.5 D = 7.5

O − E: A = 8 − 12.5 = −4.5 C = 4.5
B = 4.5 D = −4.5

$(O-E)^2$: A: $(-4.5)^2 = 20.25$ B = 20.25 C = 20.25 D = 20.25

$\frac{(O-E)^2}{E}$: A: $\frac{20.25}{12.5} = 1.62$ B = 2.7 C = 1.62 D = 2.7

this is chi-squared

(χ^2) $\sum \frac{(O-E)^2}{E}$: $1.62 + 2.7 + 1.62 + 2.7 = 8.64$

Degrees of freedom: (rows − 1) × (columns − 1)

$(2-1) \times (2-1) = 1$

Look up value of (χ^2) in critical values table

Scientific Status of Psychology

Hypothesis testing and Falsification

- only way to prove a theory is to look for disproof rather than proof
- psychology researchers aim to falsify statements of others
- basic idea: its more scientific to evidentially prove an idea wrong than it is right

Objectivity and Control

- science says that data should be objective + measurable NOT influenced by the researcher
  ↳ control is needed
- can argue that human behaviour can't be measured objectively as we react to the researcher so factors like demand characteristics are hard to eliminate

Empiricism

↳ the view that all knowledge is based on experience

- scientific research should be based on directly observable things
- main method of scientific enquiry is experimentation
- eg. Pavlov, Skinner + Bandura

Replicability

- if a study is repeated exactly, it should produce the same results
- Skinner has high levels of control and a standardised procedure which helps it to be replicated
- its central to developing scientific theory

Reliability
↳ consistency

- necessary to make wider claims that apply to the whole population
- science is a nomothetic (general) approach

Validity
↳ to be true

- if researcher can create an environment where cause and effect is established a study has internal v.
- the application of the study to other settings is external validity

Reductionism

- usually focus on one small area in isolation rather than the whole area
- in order to use empirical testing an area must be small enough to study
- issue: reduced without establishing connections
- learning theorists only investigate behaviour w/o looking at emotional and cognitive elements

Observations: Child

- No direct manipulation of IV
- Watch behaviour of participants

Naturalistic:

- Observing behaviour of Ps in their own environment
- eg. Ainsworth Uganda SS

- Environment more familiar → obs. more valid
- Own environment → hard to replicate
- Important consent is gained + parents are not deceived (they are fully aware of reasons)

Structured:

- Environment where researcher has some control
- Can be observed behind a one-way mirror/screen
- Record behaviours that would be difficult to gain from naturalistic
- Normally use a coding system
- eg. Ainsworth SS

- Coding systems allow for replicability → more reliable
- Must ensure child is not put under any undue stress

Data collected:

- Tallying → quantitative (eg. freq of behav)
- Notes → qualitative + subjective

Questionnaires + Interviews: Child

- Social desirability bias → Ps don't tell truth/ respond accurately as want to present a +ive image of themself → VALIDITY

- Some questions may not be suitable for young children, use these to assess parent/teacher views

- The CASE has questions to use with children as a measure of stressful life experiences

* * *

Features of interviews:

- expand on questions
- clarify to gather data accurately

- Interviewers in child psychology need training beforehand + must take extra care

- children have short attention spans so long interviews are inappropriate

- Language needs to be adjusted

- Interviewer effect → appearance + characteristics of interviewer can influence the way a child responds

- Demand characteristics → interviewer gives subtle cues as to what/how they want to find out then interviewees conform to perceived expectations.

Cross-Cultural Research

Allows psychologists to see if behaviour is universal across countries or cultures.
eg. Attachment.

If ccr isn't carried out the research is only relevant to one country so culturally biased

Strange situation doesn't measure attachment behaviour effectively on a universal scale

Cross Sectional Design (snapshot)

- gather info on a population at a single point in time
- decide a cross-section of population to target and compare measures
- eg. compare a group of 2yos w/ a group of 4yos with same attachment type

- immediate results } use researcher once
- more cost effective }
- fewer demands for Ps → more ethical
- Diff participants → participant variables
- data effected by upbringing/experiences of child.

Longitudinal Design

- gather data from Ps over time + determine if changes occur
- observe sample at various time intervals

- Avoids cohort effect (differences within social + cultural groups that change w/ age + time)
- more expensive + time-consuming

- Difficult to replicate (loc of money + time)
- If replicated, can't guarantee same condition
- Lose participants (attrition) → alter direction/aim

Lots of cross-cultural research is done through a meta-analysis

Meta-Analysis:

- combining + reanalysing results of multiple individual studies investigating a specific topic through a statistical technique
- better feel for trends across cultures as overall trends are easier to be identified when combined
- eg. Ijzendoorn + Kroonenberg

Researching w/ Children: Ethical Issues

BPS Code of Ethics (2009)

- Respect
- Competence
- Integrity
- Responsibility

- Parental consent must be gained - child's consent is not the same due to vulnerability + age
- Important to realise that child also has right to withdraw (along w/ parent)
- If a child becomes very distressed research should be stopped to avoid long term effects
- Child's safety and emotional state should be a priority
- Identity of child should be protected and details kept confidential

UNCRC (1989)

UN Convention on the Rights of the Child
Guidelines to ensure children are

- healthy
- can learn
- have views listened to
- treated fairly

- Best interests of child should be priority
- Every child has a right to privacy
- Governments must protect children from all forms of bad treatment

HCPC Guidelines for Clinical Practioners

Anyone who works in clinical practice (ie. with patients) have to register with the Health and Care Professions Council. They have standards that must be demonstrated

Character:

- have to provide credible character references that show character traits which make them suitable for the role

Health:

- must provide info about their general health every 2yrs and declare any health issues that could affect their ability to practise.

Standards of Proficiency:

- There are specific expectactions for each profession. This includes formulation and delivery of plans and strategies for meeting health and social care needs for practioner psychologists

Standards of Conduct, Performance + Ethics:

- There are 14 guidelines they must adhere to including maintaining confidentiality in work with service users.

Standards for continuing professional develepm.:

- Expected to take part in and document regular training. Includes training events, how they've changed + effectiveness of changes

Standards of education and training:

- There are set minimum levels of qualification specified before you can register + practise
- Practioner psychologists must have at least a master's degree w/ BPS qualification in the area of practise they will be working in.

Standards for prescribing:

- There are standards to prescribe medication which includes the required knowledge and training to be able to prescribe.

Researching Mental Health

To uncover causes you can investigate impact of diff treatment methods. There are lots of different methods depending on purpouse!

Primary and Secondary Data

- Primary → researchers gather themselves
  - → more time consuming
  - → face ethical considerations
- Secondary → evidence gathered by other researchers
  - → don't know reliability/validity

Longitudinal Studies

- takes place over a long period of time
- usually compare a single sample group w/ their own performance over time
- measure developmental or time-based changes
- eg. monitor symptom changes for treatment group
  - ↳ symptom expression + severity @ certain time intervals
  - ↳ assess effectiveness of treatment.

✓ no difficulty in comparing diff people that could be effected by individual differences

✓ only way to reliably measure effect over time

X patients may drop out/die/lose contact → reduces sample size → less valid

X by the time conclusions are drawn it may be irrelevant as clinical psych is a fast-paced area of research

Cross-Sectional Studies

- a quick 'snapshot' of behaviour in a given population
- use a large group of people in the sample to get a good 'cross-section' of the target population

- eg. may want to know experience of ppl @ diff ages with schizophrenia
  ↳ take sample of Ps at diff ages + investigate

✓ data collected quicker → conclusions can be used + acted on more rapidly
✓ more likely that the results will be more valid as they will be reported at the time where they have most application
X individual differences will have an effect
X may get cohort effects → results due to being raised in particular time etc.
  ↳ anorexia: not all groups exposed to same cultural ideals and images.

Cross-Cultural Methods

- samples from different cultural groups to draw comparisons on similarities/differences.
- eg. whether experience of schiz pts is the same in diff cultural groups

✓ allows researchers to gain an understanding of how culture plays a role in validity/reliability of diagnoses.
✓ can identify elements of abnormal behaviour attributed purely to bio factors
✓ reduce level of ethnocentrism in psych studies and improve generalisability

Meta-analysis

- looking at secondary data from multiple studies conducted by other researchers.
- usually done where there is a lot of research

Where firm conclusions can't be drawn w/o comparing OR where findings are inconsistent

- seek studies from a variety of places, cultures and times
- in clinical, meta-analyses have been done on areas such as effectiveness of therapies + treatments across different patient groups

✓. conclusions drawn from vast array of areas very quickly + at less cost

✓. no ethical concerns (unlike primary data)

X. may be undisclosed issues of reliability and/or validity

X. publication bias may affect validity of meta-analysis (null effects not published so not included)

X. if unpublished data used (to avoid publication bias) there is a risk as it has not been scrutinised by peer review

The Use of Case Studies

Case studies involve studying individuals/small groups with some kind of unique characteristic or experience

Use a variety of research methods to gather info and then they triangulate it to draw conclusions

In clinical psych case studies are usually of people with rare symptoms or individuals taking part in a specific therapy

Data is usually qualitative which allows in-depth analysis → conclusions highly valid

In clinical psych means a full understanding of the pts problems can be assessed at factors that may have an effect can be taken into account

Example: Lavarenne et al (2013)
Refers to the 'thursday group' → pts that suffer with schizophrenia/psychoaffective disorder who meet once a week

Purpouse of group is to give structure to help them cope with their illness and encourage a sense of connection

There are 10 members that have been attending from just 3 weeks to 22 years

Notes are immediately made straight after about

pts behaviour, expressions + comments

Case study is about a specific session with 6 patients present just before Christmas (facing a break of more than 7 days)

Key theme was 'fragile ego boundaries' - a breakdown in the line ppl draw between real and unreal (or own thoughts + others)

Suggested that the group may be reacting to the potential change in routine by having a longer break than normal.

Evaluation:

✓: brilliant insight into behaviour of pts involved
X: very reliant on interpretation of researcher
X: memory of group leaders may be inaccurate
↳ cause unreliable / invalid conclusions
X: small group of ps → doesn't represent target pop. → limited population validity

The Use of Interviews

Interviews involve verbal questionning to gather information. They can be:

* Structured → specific list of questions
* semi-structured → range of themes to explore
* unstructured → direction decided along the way

Example: Valentine et al (2010)
Used a semi-structured interviews to gather info about patient experiences as part of a psycho-educational group treatment programme.

The patients were 42 males, detained in Broadmoor high security hospital. Most had a diagnosis of schizophrenia or similar

The programme aimed to help them understand and cope with their illness and measures were taken to assess the impact this had on their symptoms.

The aim of the interview was to understand their experience better and see how the group could be improved in the future.

After the interviews, content-analysis was used to pick out key themes in the responses.
- what ps valued and why
- what was helpful about the group
- clinical implications
- what was difficult/unhelpful

Many reported increased confidence in

dealing with their illness and said that they valued knowing and understanding their illness and the group sessions allowed them to see how other people have similar experiences

Evaluation:

✓. patient can fully explain their point of view
✓. semi-structured allows more detail to be gathered
X. semi-structured means lack of reliability as there is no standardisation
✓. interviews were recorded so reliability of interpretation can be checked by having another researcher code the data.

Grounded Theory

Devised by Glaser and Strauss in 1960s for developing theory from research evidence

Usually done on qualitative research and goes against the scientific 'hypo-deductive method' where a hypothesis is made first.

1) Identify area of behaviour interested in
2) Find somewhere to gather info on this
3) Draw out 'codes' and 'categories' as data is gathered
4) Codes become more specific as theoretical concepts become apparent.
5) 'Memo' your work → add comments to develop clarity + help identify links.
6) Selectively code only relevant data as theoretical concepts have become obvious.
7) Start to sample people/things that gather more evidence to support what you have prev. seen
8) Review other literature + develop theory in more detail once theoretical concept is clear.

Evaluation:

✓. evidence is integrated into the theory → so theory should have good validity
BUT
X. if researchers are biased in gathering data it would be subjected and not 'grounded' by evidence
X. sampling as theory emerges can be seen as 'forcing' data to support.
X. could be unreliable if another researcher would draw different conclusions/concepts
X. takes a lot of time and skill to interpret viewpoint and code our data.

IN CLINICAL

- researchers interested in beliefs, opinions and experiences (eg. of NHS service users)
  ↓
  you CAN'T propose themes/codes before asking
  ↓
  they emerge from the analysis (grounded theory).