Week 10: Qualitative & Indigenous Research Methods

Week overview

Main concepts: qualitative meaning-making, quantitative vs qualitative paradigms, Indigenous research, theoretical frameworks, methodologies, methods, participants as subjects/informants/partners, rigour, reflexivity, thematic analysis & grounded theory.

Definition	
Term	**Meaning**
Qualitative research	Research focused on qualities, processes & meanings, not mainly quantity/frequency.
Quantitative research	Research using numerical data, structured designs & statistical analysis.
Constructionism	View that meaning/reality is socially constructed through context & relationships.
Positivism / realism	View that research can uncover general patterns/laws using objective empirical data.
Indigenous research	Research that impacts / is significant to Aboriginal & Torres Strait Islander ppl, including planning, collection, analysis & dissemination.
Theoretical framework	Conceptual lens guiding how the research question, methods & interpretation are shaped.
Methodology	Overall research approach/design logic.
Method	Specific tool for data collection/analysis, eg interview / thematic analysis.
Interpretative approach	Focuses on subjective meanings & exp.
Critical approach	Focuses on how power, culture, politics/history shape meanings & exp.
Ethnography	Study of cultural groups in natural settings over time, often using observation/interviews.
Case study	In-depth exploration of a program/event/activity/process/individual.
Phenomenology	Identifies essence of human exp around a phenomenon.
Narrative research	Studies lives/stories & re-stories them into narrative chronology.
Reflexivity	Ongoing awareness of researcher position, assumptions & influence on research.
Rigour	Thoroughness/care in design, data collection, analysis & reporting.

Term	Meaning
Triangulation	Using multiple perspectives/data sources/methods to check consistency.
Saturation	Point where no substantially new themes/info emerge.
Thematic analysis	Identifying, examining & reporting themes/patterns in data.
Grounded theory	Inductive method where theory emerges from coded data.

Quantitative vs qualitative

- **Quantitative**: fixed design, numerical data, statistics, often generalisation.
- **Qualitative**: flexible design, non-numerical data, meaning/context, depth of understanding.
- Both can be rigorous, but they judge quality differently.

Indigenous research

- Aboriginal & Torres Strait Islander research should include Indigenous ppl through planning, data collection, analysis & dissemination.
- It should recognise Indigenous worldviews, knowledges & realities as distinctive & vital.
- It should honour social protocols, land, historical/political context, voices, ppl & communities.
- Qualitative approaches can fit Indigenous research well when they adapt to non-Western ways of knowing, being & doing; but Indigenous research can also be quantitative/mixed-methods.

Ppl as subjects, informants, partners

- **Subjects**: behaviour/conduct is observed/studied.
- **Informants**: participants communicate subjective/private exp.
- **Partners**: participants/community actively shape research meaning & direction.
- Participatory action research / Aboriginal Participatory Action Research emphasises collaboration, equality, community control & transformation.

Thematic analysis steps

- Familiarisation with data.
- Generating initial codes.
- Searching for themes among codes.
- Reviewing themes.
- Defining & naming themes.
- Producing final report.

Grounded theory steps

- Code data instead of forcing data into pre-existing theory.
- Discover social processes in data.
- Construct abstract categories inductively.
- Refine categories using theoretical sampling.
- Use analytic memos to connect coding & writing.
- Integrate categories into a theoretical framework.

Eg

- **Badminton eg**: quantitative study could compare average injury rates by training load. Qualitative study could interview players about how they understand injury, pressure, coaching culture & recovery.
- **Indigenous research eg**: if researching sport participation with First Nations communities, the project should be guided by community priorities/protocols, not only researcher questions.

Qualitative quality criteria

Criterion	Meaning
Credible/authentic	Findings ring true to ppl with similar exp.
Confirmable/neutral	Findings come from participant data, not mainly researcher preference.
Transferable/applicable	Reader can judge relevance to other contexts.
Dependable/consistent	Process is clear enough to understand how findings were produced.
Audit trail	Transparent record of decisions from start to findings.
Deviant/negative case analysis	Search for data that contradict emerging patterns.

Strengths	Limitations
• Captures depth, context, lived exp & meaning. • Can adapt flexibly to participants/community context. • Useful for Indigenous/community research when grounded in respectful partnership.	• Usually does not aim for broad statistical generalisation. • Researcher preconceptions/bias must be managed through reflexivity. • Quality depends on transparent method, saturation, audit trail & careful analysis.

Quick memory summary

• Qualitative = meaning/context/depth.

• Indigenous research = must be relevant/respectful to Indigenous ppl & communities.

- Rigour = credible, confirmable, transferable, dependable.
- Reflexivity = stepping in, stepping out & stepping sideways.

Week 11: Ethics, Integrity & Data Management

Week overview

Ethical responsibility in psych research, research integrity & safe data management.

Main concepts: National Statement, research merit & integrity, justice, beneficence, respect, informed consent, privacy/confidentiality, right to withdraw, data identifiability & responsible reporting.

Definition	
Term	**Meaning**
Ethics	Principles guiding how research protects participants & communities.
National Statement	Australian human research ethics guidance applying to human research.
Research merit & integrity	Research is justified, well-designed, literature-based, respectful, competent & transparent.
Justice	Fair recruitment, fair inclusion/exclusion, no exploitation & fair distribution of burdens/benefits.
Beneficence	Benefits must justify risks; researchers minimise harm/discomfort & clarify risks/benefits.
Respect for persons	Respect privacy, confidentiality, beliefs, perceptions, customs, cultural heritage & capacity for decision-making.
Informed consent	Voluntary agreement based on adequate plain-language info.
Voluntary participation	Participants should not feel coerced.
Capacity to consent	Participant can understand what they agree to.
Right to withdraw	Participant can stop taking part without penalty, generally at any time.
Privacy	Control over access to personal information.
Confidentiality	Researcher protects participant information from unauthorised disclosure.
Identifiable data	Data includes direct personal identifiers, eg name/address/phone.
Deidentified data	Direct identifiers removed / unique ID not tied to identity in dataset.
Re-identifiable data	Identity can be found again using separate code/key.

Term	Meaning
Research integrity	Honest, accurate, transparent & accountable conduct of research.
Responsible data management	Safe collection, storage, use, sharing, retention & disposal of data.

Why psych research is ethically sensitive

- Research may involve ppl at increased risk of harm.
- Psychological harm can be subtle but lasting.
- Data often includes highly personal info.
- Participants must understand risks/benefits before consenting.

Core ethical principles

- **Research merit & integrity**: study must have value, suitable methods & competent supervision.
- **Justice**: participant burden/benefit must be fair.
- **Beneficence**: likely benefits must justify risks/harm/discomfort.
- **Respect**: participants' welfare, beliefs, culture, privacy & decision-making capacity matter.

Informed consent checklist

- Use plain language.
- Explain purpose, tasks, time, risks, benefits, confidentiality & data handling.
- Make clear participation is voluntary.
- Explain right to withdraw & any limits to withdrawal.
- Use extra protection where participants have diminished capacity.

APA/stat reporting quick guide

- **Chi-square**: report df, N, chi-square value & p.
- **t-test**: report df, t value & p.
- **ANOVA**: report between-groups df, within-groups df, F & p.
- **Correlation**: report r(df) & p, where df = N - 2.
- **Regression**: report beta/B, t, p, R2 & F where relevant.

Eg

- Badminton research eg: if measuring injury history & mental health in players, consent form should explain sensitive questions, withdrawal, privacy, support options & how identifiable data will be protected.

Data type guide		
Type	**Meaning**	**Risk**
Identifiable	Contains direct personal identifiers.	Highest privacy risk.
Re-identifiable	Dataset uses code, but separate key can reveal identity.	Needs strong key storage/security.
Deidentified	Direct identifiers removed & not linked in dataset.	Lower risk, but re-identification may still be possible with rare details.

Quick memory summary

- Ethics = protect participants/community.
- Core principles: merit/integrity, justice, beneficence, respect.
- Consent must be voluntary, informed & understandable.
- Data management matters cuz psych data can be sensitive.

PYB210 Quick Formula & Output Guide

Concept	Quick guide
ANOVA F-ratio	F = MSbetween / MSwithin. Large F means BG variability is large relative to WG/error variability.
ANOVA dfs	dfbetween = k - 1; dfwithin = N - k; dftotal = N - 1.
ANOVA decision	If Fobserved > Fcritical / p < alpha, reject H0.
RM ANOVA	Same participants across IV levels; check sphericity; use correction if breached.
Correlation	r ranges -1 to +1; sign = direction; magnitude = strength.
Regression	Y-hat = a + bX; a = constant/intercept, b = slope.
r2 / R2	Proportion/percentage of variance explained by the relationship/model.
Power	Power = 1 - beta; recommended often > .80. Increase N -> increase power.
APA ANOVA	F(dfbetween, dfwithin) = value, p = value.
APA correlation	r(df) = value, p = value; df = N - 2.

Final memory rule

- Design answers “what kind of study is this?”
- Measurement answers “what exactly is being measured/manipulated?”
- Analysis answers “what statistical/qualitative logic fits the research question?”
- Ethics answers “how are participants/data/community protected?”