

Qualitative Research

Week 5

Research Design

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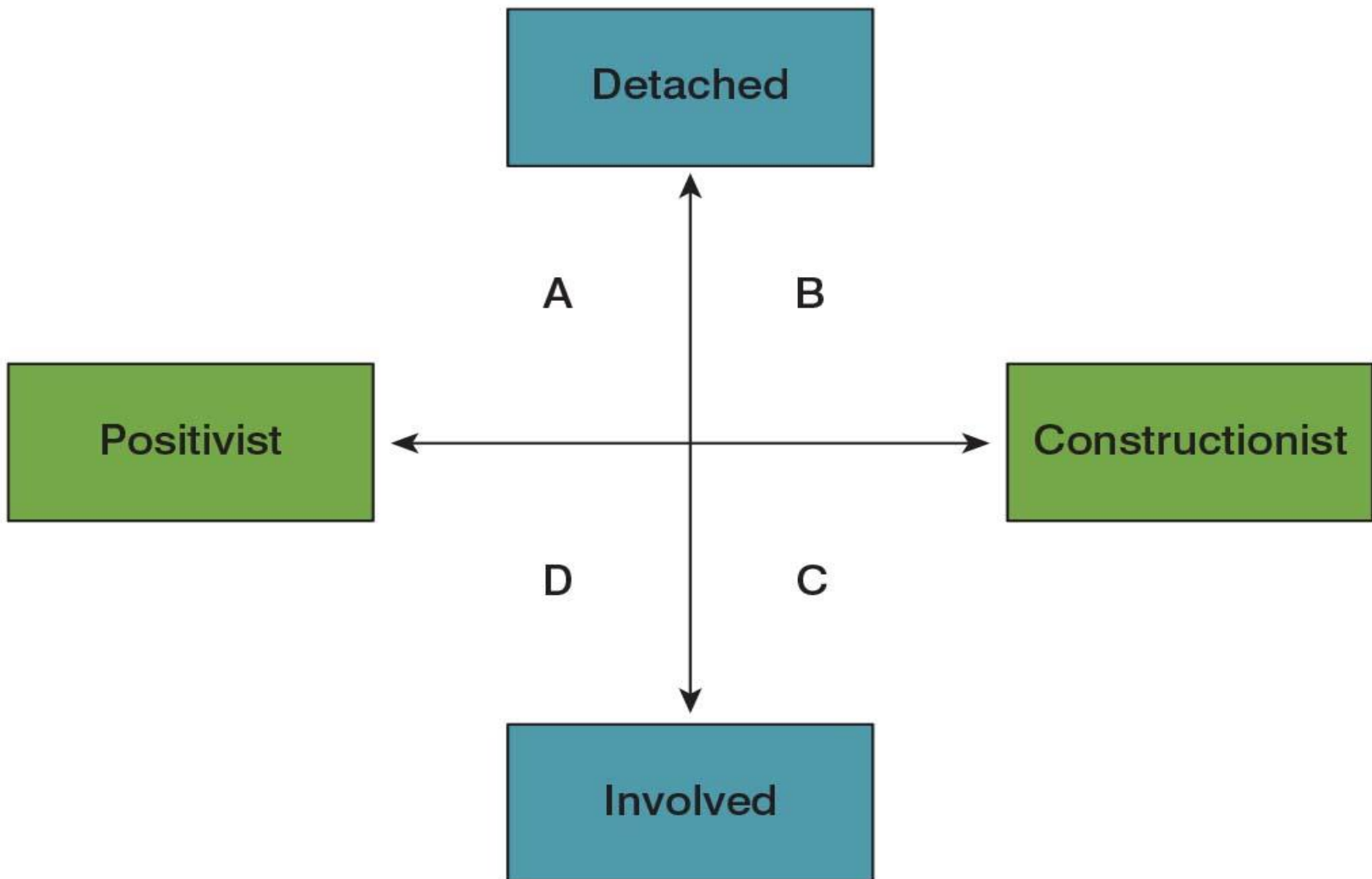
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Research design

- Is about **making choices** about what will be observed, and how
- Is a **statement** (written often before any data is collected) which **explains and justifies** the data that is to be gathered, and how this will be achieved
- **Explains** how **data** will be collected and analysed and **how** this will provide answers to the central questions of the research

Epistemology and research style



Positive designs: experimental methods

- Classic experimental method involves **random assignment** of study participants to an **experimental** or a **control** group in order to compare effects of experimenter/researcher manipulation

Positive designs: experimental methods

- **Advantages**

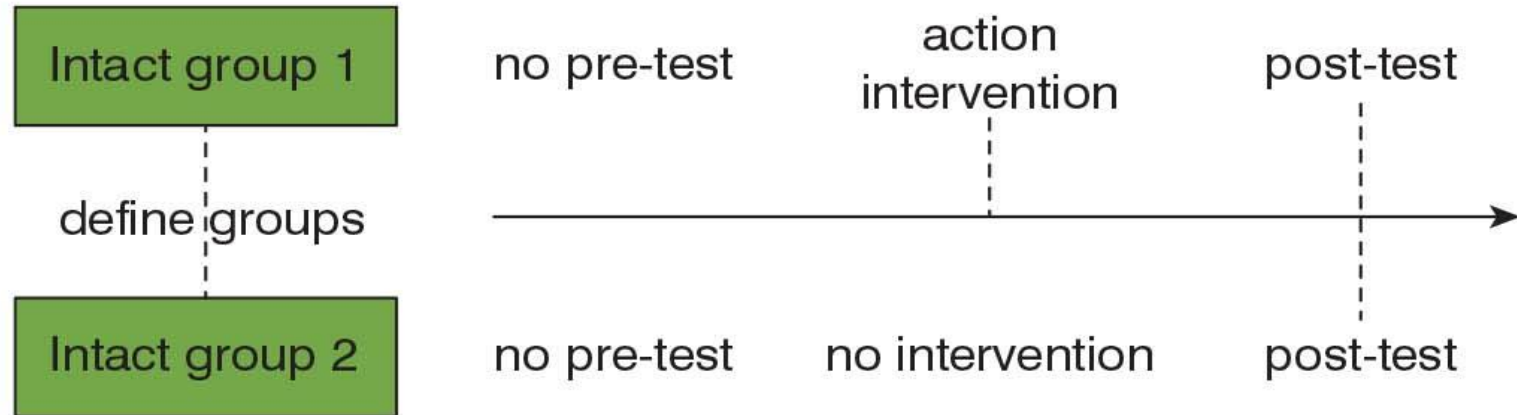
- Clarify investigations
- Replicable

- **Disadvantages**

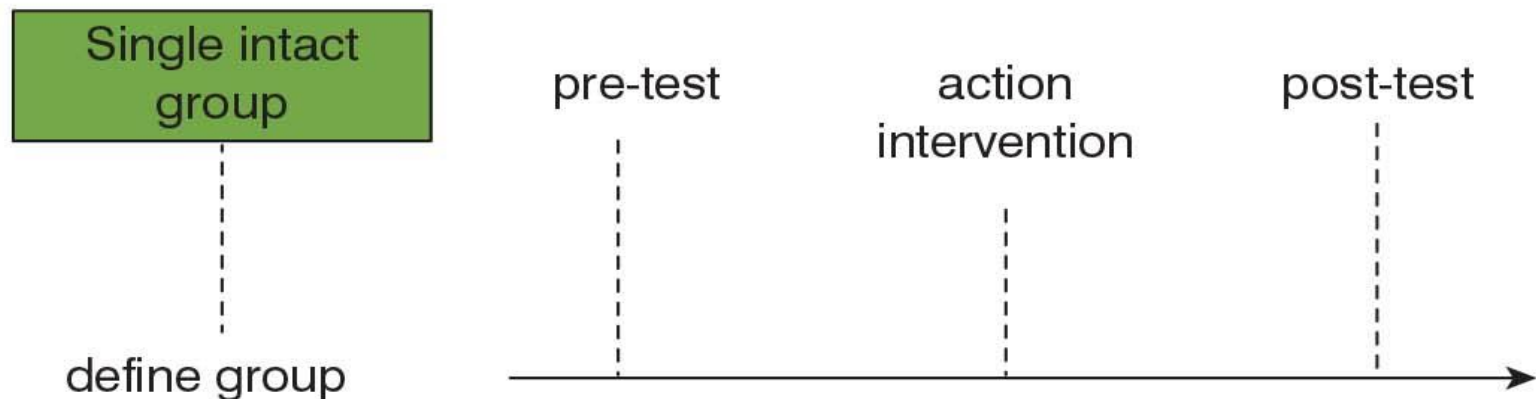
- Practical
- Ethical
- Rarely possible to truly randomize

Positive research designs: quasi-experimental designs

a) Cross-sectional comparison: the post-test only design

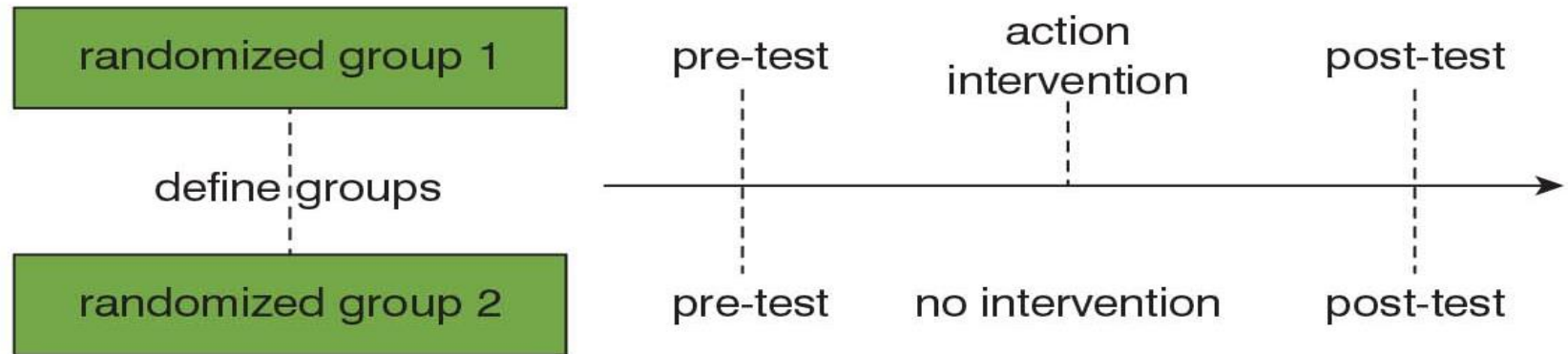


b) Longitudinal design

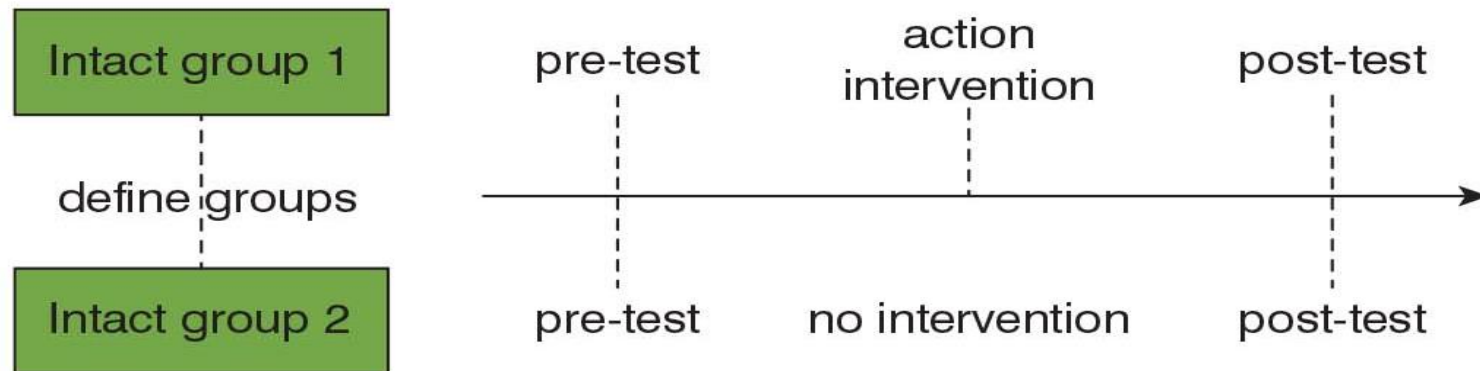


Positive research designs: quasi-experimental designs

c) Randomized control group design



d) Non-equivalent control group design



Validity of positivist experimental designs

- Internal validity
 - Maximizing the internal validity requires the elimination of plausible alternative explanations for any differences observed between groups
- External validity
 - Maximizing the external validity is specifying the extent to which the study can be generalized

Positivist designs: survey research

- **Factual surveys** – involve collecting and collating relatively ‘factual’ data from different groups of people by structured interviews or survey feedback
- **Inferential surveys** – are aimed at establishing relationships between variables and concepts
- **Cross sectional surveys** – seek to find patterns that emerge from large quantities of data
- **Validity** which is important and assured by pre-testing the research instruments

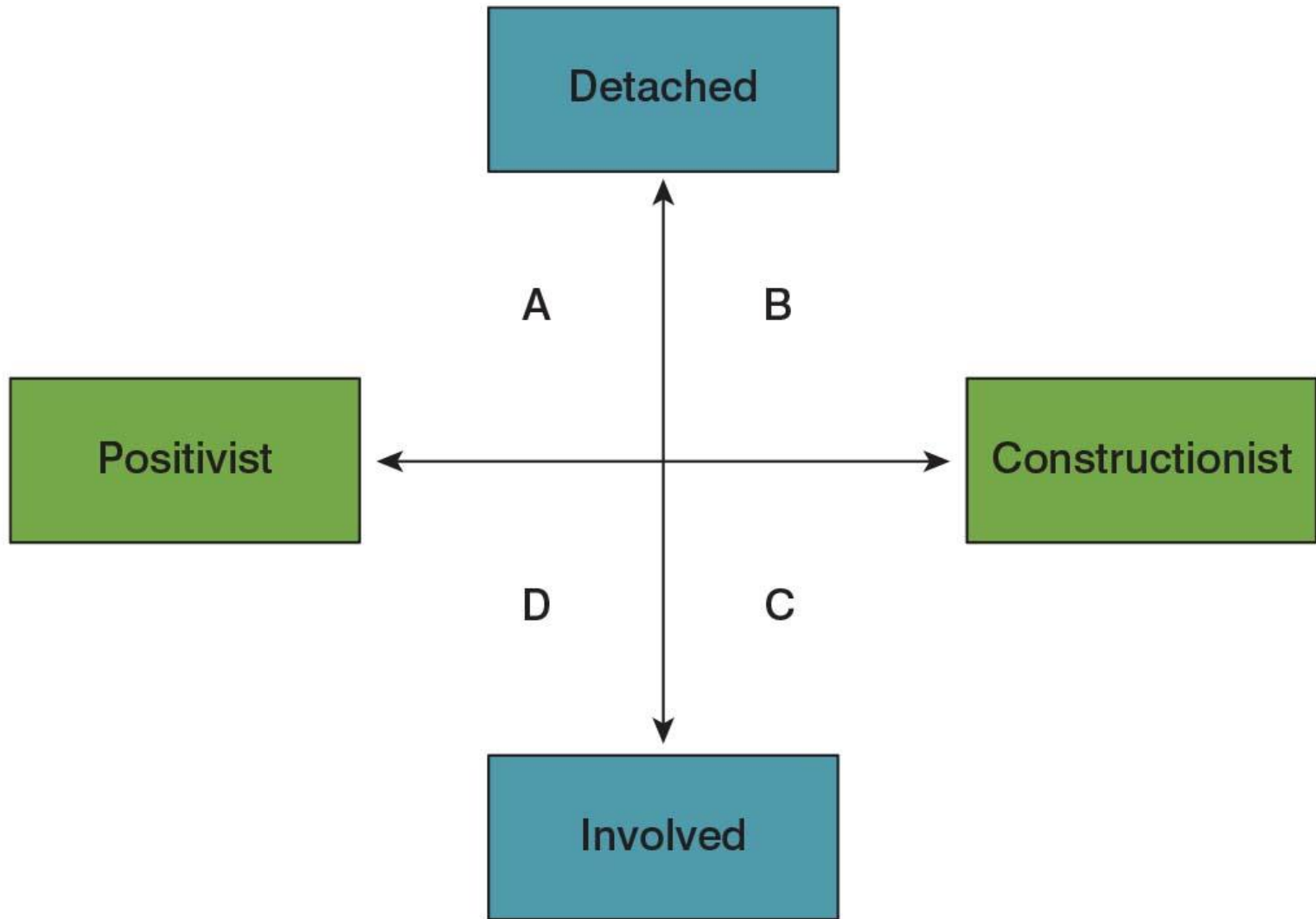
Sampling

- Basic principles underlying decisions on sampling design: **representativeness** and **precision**
- Probability sampling designs – possible to be precise about the relationship between sample and population
 - Simple random sampling, stratified random sampling, systematic random sampling, cluster sampling, multi-stage sampling
- Non-probability sampling designs – all share the same characteristic but harder to generalize results
 - Convenience sampling, quota sampling, purposive sampling, snowball sampling

Sampling designs

		Bias	
		<i>High</i>	<i>Low</i>
Precision	<i>High</i>	Precisely wrong	Precisely right
	<i>Low</i>	Imprecisely wrong	Imprecisely right

Quadrants B and C



Constructionist research designs

Constructionist research designs

- Action research and cooperative inquiry
- Archival research
- Ethnography
- Narrative methods
- Research results should be believable and reached through methods that are transparent

Case method and grounded theory

- Case studies – look in depth at one, or a small number of, organizations, events, or individuals, often over time

Grounded theory is research **method** in which the theory is developed from the data and offers an explanation about the main concern of your substantive data

Must	Key analytical operations
• fit the substantive area • be understandable and useable by the respondents • be sufficiently sophisticated to account for the variation observed	• a cycle of theoretical sampling • constant comparisons • evolving theory, <i>leading to</i> • theoretical saturation

Mixed methods

Arguments for

- Increase confidence & credibility
- Can increase validity
- Stimulate creative and inventive designs/methods
- Can uncover deviant dimensions
- Can help synthesis and integration of theories
- May serve as a critical test of competing theories
- Combine confirmatory and exploratory research
- Present greater diversity of views
- Potentially better (stronger) inferences

Arguments against

- Replication is difficult
- Research design must be relevant to the research question
- Take up more resources than single method studies
- Use requires a competent overall design
- Researcher needs to be skilled in the use of both methods
- Is not helpful if one method simply provides window dressing for the other

Common design dilemmas

- Being clear on your unit of analysis
- Is your theory a universal one or local knowledge?
- Which should you privilege: theory or data?
- Is your study going to be cross-sectional or longitudinal?
- To what extent do you need to verify findings or falsify them?

Contrasting views on validity, reliability and generalizability

Viewpoint	Strong positivist	Positivist	Constructionist	Strong constructionist
Validity	Has the design excluded all rival hypotheses?	Does the design make it possible to eliminate plausible alternative explanations?	Have a sufficient number of perspectives been included?	Does the study clearly gain access to the experiences of those in the research setting?
Reliability	Do the measures correspond closely to reality?	Do the measures used provide a good approximation to the underlying concepts of interest?	Will similar observations be reached by other observers?	Is there transparency about data collection and interpretation?
Generalizability	Does the study confirm or contradict	Are the patterns observed in the sample data	Is the sample sufficiently diverse to	Do the concepts and constructs derived from this

Further reading

- Charmaz, K. (2014) *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*, 2nd edn. London: Sage.
- Creswell, J.W. (2003) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 2nd edn. Thousand Oaks, CA: Sage.
- Shadish, W.R., Cook, T.D. and Campbell, D.T. (2002) *Experimental and Quasi-Experimental Designs for Generalized Casual Inference*. Boston, MA: Houghton Mifflin.
- Teddlie, C. and Tashakkori, A. (2009) *Foundations of Mixed methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences*. London: Sage.