

Selecting a Study Design



Topics covered

- Differences between quantitative and qualitative study designs
- Common study designs in quantitative research
- Common study designs in qualitative research
- Other philosophy-guided designs



Differences between quantitative and qualitative study designs

- Quantitative studies designs:
 - Specific
 - Rigid
 - Well structured
 - Ensure validity and reliability
- Qualitative research designs:
 - Flexible
 - Emergent
 - Non-sequential

Differences in philosophical perspectives determine the approach of enquiry



Study designs in quantitative research

Study designs can be classified by examining from three different perspectives:

1. The number of contacts with the study population
2. The reference period of the study
3. The nature of the investigation



Study designs based on the number of contacts

- **Cross-sectional:** most common and take a cross-section of the population at one point in time
- **Before-and-after:** also known as pre-test/post-test design which take two cross-sectional data collection points on the same population to find out changes.
- **Longitudinal:** the population is researched a number of times; a series of repetitive cross-sectional studies collecting the same information



Study designs based on the reference period (time-frame)

- **Retrospective:** investigate things that happened in the past
- **Prospective:** investigate things that are likely to happen in the future, such as experiments
- **Retrospective-prospective:** focus on both past trends and study it into the future, such as before-and-after studies without a control group



Study designs based on the nature of the investigation

- **Experimental:** starting from the cause to establish the effect; the researcher introduces the intervention that is assumed to cause the change in a controlled or natural environment.



Experimental designs

- Random design
- The after-only design
- The before-and-after experimental design
- The control group design
- The double control group design
- The comparative design
- The 'matched control' experimental design
- The placebo design



Study designs based on the nature of the investigation - continued

- **Non-experimental:** Starting with the effect to research the cause; a phenomenon is known and the researcher attempts to establish what caused it.
- **Quasi- or semi-experimental:** This design has elements of both experimental and non-experimental studies.



Figure 8.1 Types of study design

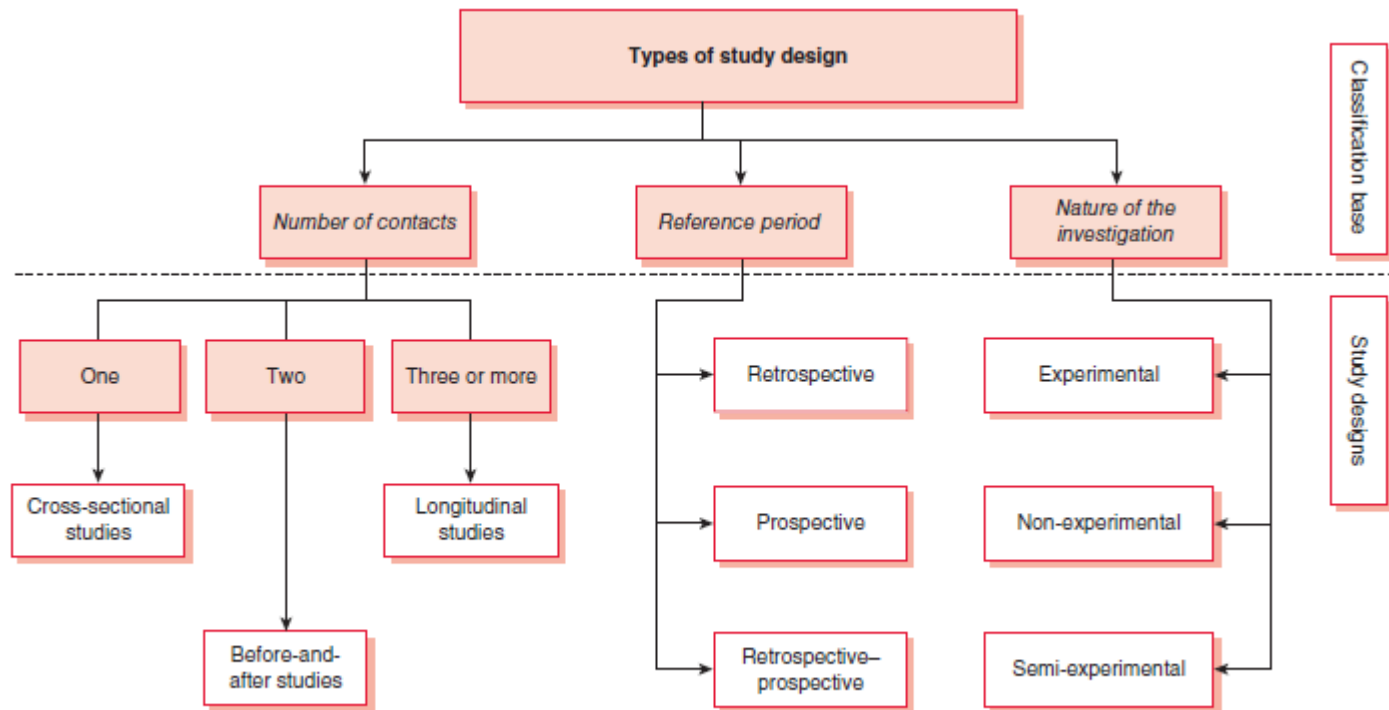


Figure 8.1 Types of study design



Other quantitative designs

- Online surveys
- The cross-over comparative experimental design
- The replicated cross-sectional design
- Trend studies
- Cohort studies
- Panel studies
- Blind studies
- Double-blind studies



Study designs in qualitative research

- **Case studies:** In-depth exploration of a atypical case of a particular event, group, instance, etc.
- **Oral history:** Obtaining, recording, presenting and interpreting information in someone's own words
- **Focus groups/ group interviews:** Facilitated group interviews of an open discussion of a topic



Study designs in qualitative research continued

- **Participant observation:** Researcher gets involved in a social interaction and observes the situation first hand
- **Holistic research:** More a philosophy, research from every perspective
- **Community discussion forums:** Large group discussion
- **Reflective journal log:** Diary of the researcher's thoughts



Other philosophy-guided designs

- **Action Research:** Research that requires action to improve practice or take action to an issue
- **Feminist research:** Underpinned by feminist concerns in terms social inequality between men and women
- **Participatory and collaborative research enquiry:** Based on the philosophy of community development involving community members actively in the research process

