

Qualitative v. Quantitative Research

The background of the slide is a dark blue-grey color. On the left side, there is a faint, light-colored compass rose with a needle pointing towards the top-left. The compass has letters 'N', 'E', 'S', and 'W' visible. To the right of the compass, there is a faint line graph with several peaks and valleys, representing data trends. The overall aesthetic is clean and academic.

Quantitative research

- ▶ An inquiry into an identified problem, based on testing a theory
- ▶ Measured with numbers, and analyzed using statistical techniques
- ▶ Goal is to determine whether the predictive generalizations (hypotheses) of a theory hold true.

Assumptions Underlying Quantitative Methods

- ▶ truth is objective or “out there,”
- ▶ the researcher should remain distant and independent of what is being researched;
- ▶ the values of the researcher do not interfere with, or become part of, the research
- ▶ the goal is to develop generalizations that contribute to theory and enable the researcher to predict, explain, and understand some phenomenon.

Three general types of quantitative methods:

1. Experiments

- True experiments are characterized by random assignment of subjects to experimental conditions and the use of experimental controls.

2. Quasi-Experiments

- Quasi-experimental studies share almost all the features of experimental designs *except* that they involve non-randomized assignment of subjects to experimental conditions.

3. Surveys

- Surveys include cross-sectional and longitudinal studies using questionnaires or interviews for data collection with the intent of estimating the characteristics of a large population of interest based on a smaller sample from that population.

Qualitative Research

- ▶ Goal of understanding a social or human problem from multiple perspectives.
Conducted in a natural setting
- ▶ Involves a process of building a complex and complete picture of the phenomenon of interest.

Assumptions Underlying Qualitative Methods

- ▶ multiple perspectives exist in any given situation and are highlighted as part of the study-- the researcher's, those of the individuals being investigated, and the reader or audience interpreting the results
- ▶ the researcher interacts with those he studies
- ▶ research is context-bound – it only applies in that setting
- ▶ the goal is to uncover and discover patterns or theories that help explain a phenomenon of interest
- ▶ determinations of accuracy involve verifying the information with informants or "triangulating" among different sources of information (e.g., collecting information from different sources).

Three general types of qualitative methods:

1. Case Studies

- In a case study the researcher explores a single entity or phenomenon ('the case') bounded by time and activity (e.g., a program, event, institution, or social group) and collects detailed information through a variety of data

2. Descriptive Studies

- Examining a phenomenon through interview, observation, etc.

3. Historical Studies

- Comparing a current phenomenon to that of the past

A Comparison

Research with Subjects (Quantitative)	Research with Informants (Qualitative)
1. What do I know about a problem that will allow me to formulate and test a hypothesis?	1. What do my informants know about their culture that I can discover?
2. What concepts can I use to test this hypothesis?	2. What concepts do my informants use to classify their experiences?
3. How can I operationally define these concepts?	3. How do my informants define these concepts?
4. What scientific theory can explain the data?	4. What folk theory do my informants use to explain their experience?
5. How can I interpret the results and report them in the language of my colleagues?	5. How can I translate the cultural knowledge of my informants into a cultural description my colleagues will understand?

Questions to consider when evaluating scientific evidence ...

- ▶ Was a quantitative or qualitative research approach adopted?
- ▶ Was the research approach appropriate given the problem investigated and the goals of the research?
- ▶ Were appropriate types of conclusions drawn given the research approach used?