

Research: a planned course of action that aims to understand a phenomenon or find answers to research Qs.

Common in all research (Quantitative and Qualitative):

- ☐ Seeks answers to questions.
- ☐ Utilized a predetermined group of procedures to get these answers.
- ☐ Collects data.
- ☐ Generates results 1- not determined in advance.
2-often applicable beyond immediate boundaries of the study.

Research Methodology : The pathway or approach of action that justifies the selection and employment of certain methods .

Research Methods : The means of execution of the research

Quality refers to the What, How, When, Where, and Why of a thing.

Qualitative research is linked to meanings, concepts, definitions, characteristics, symbols, and descriptions of things.

- provides a holistic view for the social phenomenon.
- answers "how" questions rather than "how many" :
"It looks at X in terms of how X varies in different circumstances rather than how big X is or how many Xs there are".
- seeks to understand a research problem from perspective of the local population it involves.
- Describes how people experience a given research issue.
- offers unique opportunities for understanding complex situations.
- concerned with concepts and idiosyncratic characteristics of a select group.
"SO the findings or theory may only applicable to a similar group "
- seeks to understand the phenomenon under study in context of culture or setting in which it has been studied (naturalistic)
- It is effective in obtaining culturally specific information about value, opinions, behavior, and social contexts of specific populations.
- Adj used : Rich, Deep, Thick.

- Qualitative studies involve the systematic collection, organization, description and interpretation of textual, verbal or visual data.
 - Quantitative studies generally involve the systematic collection of data about a phenomenon, using standardized measures and statistical analysis.
 - Quantitative leans toward " what "Qs qualitative tends toward "why/ how".
 - Ethical considerations are often more complex in qualitative research .
- Qualitative can complement quantitative data.
For example, a qualitative phase of research might precede quantitative data collection in order to explore a new area, to generate hypotheses, or to help develop data collection instruments. In turn, qualitative research might follow a quantitative phase of research in order to elucidate and explain the 'numbers' or to probe the issues more in depth with a smaller number of individuals

Qualitative research	Quantitative research
Inductive	Deductive
Subjective	Objective
Impressionistic	Conclusive
Holistic, interdependent system	Independent and dependent variables
Purposeful, key informants	Random, probabilistic sample
Not focused on generalization	Focused on generalization
Aims at understanding, new perspectives	Aims at truth, scientific acceptance
Case studies, content and pattern analysis	Statistical analysis
Focus on words	Focus on numbers
Probing	Counting

	Qualitative Research	Quantitative Research
Purpose	Discover ideas; develop a detailed and in-depth understanding of a phenomenon	Test hypotheses or specific research questions
Approach	Observe and interpret	Measure and test
Data Collection Methods	Unstructured; free- forms	Structured; response categories provided
Researcher Independence	Researcher is intimately involved; results are subjective	Researcher is unininvolved; results are objective
Sample	Small samples – often natural setting	Large samples to allow generalization
Most often used in:	Exploratory research designs	Descriptive and causal research designs

Characteristics of Qualitative Research

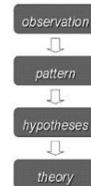
1-Focus on Meaning and Understanding

- interested in how people interpret their experiences, how they construct their worlds, what meaning they attribute to their experiences.
- Patton (1985) explains: [Qualitative research] is an effort to understand situations in their uniqueness as part of a particular context and the interactions there. This understanding is an end in itself, so that it is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting what it means for participants to be in that setting, what their lives are like, what's going on for them, what their meanings are, what the world looks like in that particular setting and in the analysis to be able to communicate that faithfully to others who are interested in that setting . . .
- The analysis strives for depth of understanding.
- The key concern is understanding the phenomenon of interest from the participants' perspectives, not the researcher
- sometimes referred to as the emic or insider's perspective, vs the etic or outside's view.
- Etic perspective corresponds with quantitative research.

Deduction



Induction



WHY TO USE QUALITATIVE RESEARCH?

- limitations (and criticism) of quantitative approaches.
- Qualitative research emphasizes that human beings should be studied as agents capable of self-reflection and giving meanings to their actions.

2-Researcher as Primary Instrument

- Since understanding is the goal, the human instrument, which is able to be immediately responsive and adaptive, would seem to be the ideal means of collecting and analyzing data.
- **Other advantages are:**
 - 1-the researcher can expand his or her understanding through nonverbal + verbal communication
 - 2-process information (data) immediately
 - 3- clarify and summarize material
 - 4- check with respondents for accuracy of interpretation, and explore unusual or unanticipated responses.

4-The process is inductive.....

- used when a lack of theory or an existing theory fails to adequately explain a phenomenon.
- qualitative research process is **inductive**: gather data to build concepts, hypotheses, or theories rather than deductively testing hypotheses as in positivist (quantitative) research.
- pieces of info from interviews, observations, or documents combined and ordered into larger themes **from the particular to the general**.

ESSENTIAL FEATURES OF QUALITATIVE RESEARCH

- 1.Perspectives of the participants and their diversity.
- 2.Reflexivity of the researcher.
- 3.Variety of approaches and methods.
- 4.Subjectivity.
- 5.Focus on the whole (holistic picture).
6. methodology is flexible because it may use multiple methods to examine the same Q or area ('triangulation').
- 7.Iteration
8. Qualitative research can complement quantitative data. For example, a qualitative phase of research might precede quantitative data collection in order to explore a new area, to generate hypotheses, or to help develop data collection instruments. In turn, qualitative research might follow a quantitative phase of research in order to elucidate and explain the 'numbers' or to probe the issues more in depth with a smaller number of individuals

3-Rich Description of the end product

- Words and pictures rather than numbers are used to convey what the researcher has learned about a phenomenon.
- There are likely to be descriptions of the context, the participants involved, and the activities of interest.
- In addition, data in the form of quotes from documents, field notes, and participant interviews, excerpts from videotapes, electronic communication are always included in support of the findings of the study.

RESEARCH DESIGN

- The blueprint for performing the research.
- The scheme or action plan for achieving the objectives of the research (Research questions should be finalized before deciding research design)
- logical sequence that connects the empirical data to a study's initial Qs and conclusions.
- includes how the study will be conducted, type of data gathered and how , sample size, and research setting.

MAJOR TYPES OF QUALITATIVE RESEARCH

• **Ethnographies:** researcher studies an intact cultural group in a natural setting over a prolonged period of time by collecting observational data.
** process is flexible and typically evolves contextually in response to the lived realities encountered in the field setting.

• **Case studies:** in which the researcher explores in depth a program, an event, a process, or one or more individuals.

• **Narrative research:** a form of inquiry in which the researcher studies the lives of individuals and asks one or more to provide stories about their lives.

• **Phenomenological research:** researcher identifies the essence of human experiences concerning a phenomenon, as described by participants in a study. ~~involves studying a small number of subjects through extensive and prolonged engagement to develop patterns and relationship of meanings.~~

**Understanding lived experiences marks phenomenology = philosophy or method.

The most basic philosophical assumption was that we can only know what we experience by attending to perceptions and meaning.

• **Grounded theory:** researcher attempts to derive a general, abstract theory of a process, action or interaction grounded in the views of participants in a study, involves using multiple stages of data collection and refinement and interrelationship of categories of information.

Naturalistic Design

- " if it took place in a real setting rather than a laboratory, and what was being observed and studied was allowed to happen "naturally."
- investigator doesn't control what is being studied.

Qualitative research process

- Select topic and problem identification.
- Justify significance of study
- Design study
- Identify and gain access to subjects
- Select study subjects and data (purposive sampling)
- Analyze data
- Interpret results/conclusion

QUALITATIVE DATA COLLECTION METHODS

1) **Observations:** researcher takes field notes in an unstructured or semi structured way on activities and behaviors of individuals at the research site.

2) **Interviews:** the research conducts face to face interviews with participants, interviews participants by telephone or engages in focus group interviews with 6-8 interviewees in each group. These interviews involve unstructured and generally open ended Qs that are few in number and intended to elicit views and opinions from participants.

3) **Document review/analysis:** researcher may collect documents may be public (newspapers, reports, letters)/ not sharply divided from other activities.

** an ongoing process = continual reflection about data, asking analytic Qs, and writing memos during the study.

• • first step is to develop thorough and comprehensive descriptions of the phenomenon (thick descriptions)

Qualitative research approaches:

- some approaches more appropriate to certain research goals .
- Qualitative research design is emergent
- initial plan cannot be tightly prescribed, all phases may change or shift after researchers enter field and begin to collect data.

PURPOSES OF QUALITATIVE RESEARCH

- Describe
- Understand
- Explain
- Identify
- Develop
- Generate

What research Qs answered by qualitative research?

- 'Lived
- 'Insider' perspective of reality (Emic)
= approach refers to interpretation of data from perspective of population under study .
- Context/ meaning rather than measurement oriented. Data gathered by actually talking directly to people and seeing them behave and act.

QUALITATIVE SAMPLING

- a key element of a study design.
- Usually non probability .
- **Convenience sampling** allows researcher to select participants who are readily accessible or available.
- **Purposive sampling** avails of accessible participants + additional advantage of facilitating the selection of participants whose experiences are required .

FEASIBILITY

- must be considered early on in the design phase of a study, in order to determine whether the research is likely to be successfully completed.
- Researchers need to consider staffing requirements for data collection, analysis, and presentation of results, as well as budget constraints, and required time frames.
 - **For example**, 100 page questionnaire or attend a 2 day focus group meeting is unlikely to be considered feasible by most people.
- The scope of the project must also be feasible, with refinement of research Qs to a focused topic.
- When considering feasibility of research, the limitations of researcher expertise must also be taken into account.

Quantitative	Qualitative
Study design is stable from beginning to end	Some aspects are flexible (addition, exclusion or wording of interview Q)
Participants responses don't influence how and which Qs asked next	Participant responses affect how and which Qs asked next
Study design is subject to statistical assumptions and conditions	Study design is iterative= data collection and Qs are adjusted according to what is learned.

Trustworthiness of qualitative research

- assessment of quality and worth of complete study.
- Help to determine how study findings reflect the aims of the study, according to the data provided by respondents
 - **has four components:**

1. **Credibility=truth value** (VS internal validity): the confidence that can be placed in the truth of the research findings. establishes whether research findings represent plausible info drawn from participants' original data and a correct interpretation of his original view

2. **Transferability= applicable** (VS external validity): the possibility that a qualitative study's theoretical position can be used in other contexts, other cohorts or population groups.

3. **Dependability=consistency** (VS reliability): whether a study's findings could be achieved, and the working methods repeated, so another researcher conduct the same study.

4. **Confirmability=neutrality** (VS objectivity): ensures that a study's findings are clearly representative of participants' views, rather than the researchers' preferences.

• **Rigour =quality of research.** achieved by:

1. Clear descriptions of the sample needed for meaningful study .
2. An indication of how and why sample was chosen.
3. Engagement with others: multiple researchers to code or discuss data widely.
4. use of Qs in representation of data findings.
5. An assessment of a researcher assumptions about data
6. Peer review of findings.
7. Clearly defined study design.
8. Triangulation (examining the phenomenon from different angles; measures, methods, researchers).

Criterion	Strategy employed
Credibility	<ul style="list-style-type: none"> • Prolonged engagement • Peer briefing • Triangulation • Member checks
Transferability	<ul style="list-style-type: none"> • Providing thick description • Purposive sampling
Dependability	<ul style="list-style-type: none"> • Create an audit trail • Triangulation
Confirmability	<ul style="list-style-type: none"> • Triangulation • Practise reflexivity

Rigor and Quality in Research Methods

Quantitative

› Internal Validity

› External Validity

› Reliability

› Objectivity

Qualitative

› Credibility (truth value)

› Transferability (applicability)

› Dependability (consistency)

› Confirmability (neutrality)

Papers on various types of Qualitative research

- The tension between person centred and task focused care in an acute surgical setting: A critical ethnography.
- An investigation on physicians' acceptance of hospital information systems: a case study
- What do patients say about their physicians? An analysis of 3000 narrative comments posted on a German physician rating website
- The nurses and physicians perceptions of ethical self-care in their professional relationship with each other: A phenomenological study.
- Getting work done: a grounded theory study of resident physician value of nursing communication

LIMITATIONS OF QUALITATIVE RESEARCH

- The main limitation of qualitative research is that their findings cannot be extended to wider populations with the same degree of certainty that quantitative analyses can (**limited generalisability**) .

Check Your Understanding Question

Which of the following is true about qualitative research?

- A. Data are usually collected in a laboratory setting.
- B. Focus is on studying the "whole".**
- C. Focus is on generalisation.
- D. Qualitative research is deductive.

