

QuaLtitative Research

The "L" side in the Paradigm War
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Qualitative Paradigm

- "A qualitative study is as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting. ."

(Creswell, J. *Research Design: Qualitative and Quantitative Approaches*. Sage: 1994.)

"The Qualitative Paradigm examines the patterns of meaning which emerge from the data often presented in the participants' own words. The task of the qualitative researcher is to find patterns within those words (and actions) and to present those patterns for others to inspect while at the same time staying as close to the construction of the world as the participants originally experienced it."

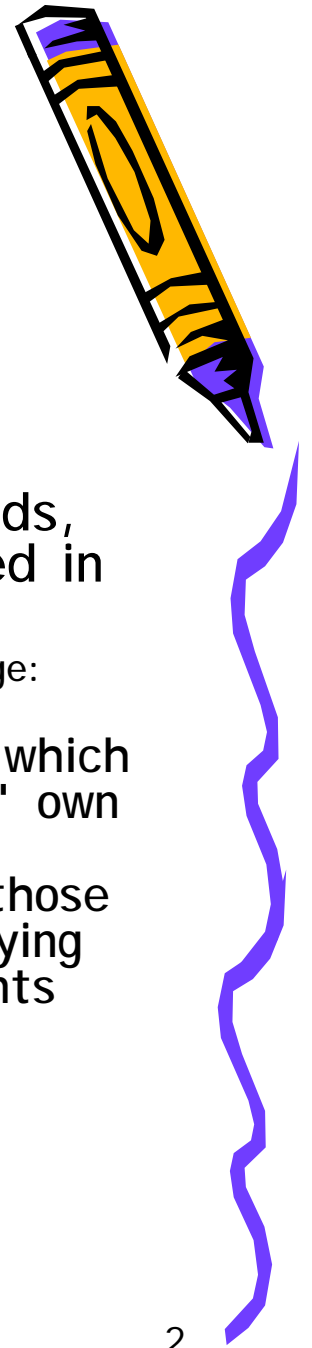
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Qualitative Research:

- The intent of qualitative research is to understand, and give meaning to, a particular social situation, event, role, group, or interaction.
- Is an investigative process where the researcher gradually makes sense of a social phenomenon by contrasting, comparing, replicating, cataloging and classifying the unit of analysis.
- Involves immersion into the everyday life of the setting chosen for the study; the researcher enters the informant's world and through ongoing interaction, seeks informants' perspectives and meanings.
- Uses the researcher as the key measurement tool; procedures are subjective; and analysis is ongoing



The paradigm framework is made up of a POEM:

- P Philosophy
- O Ontology
- E Epistemology
- M Methodology

- P: Reality as a social construct, contextual truths.
- O: The nature of the psyche, of perception, creativity, intelligence
- E: self verified evidence, recorded testimony
- M: Phenomenology, ethnography, grounded theory, Delphi...

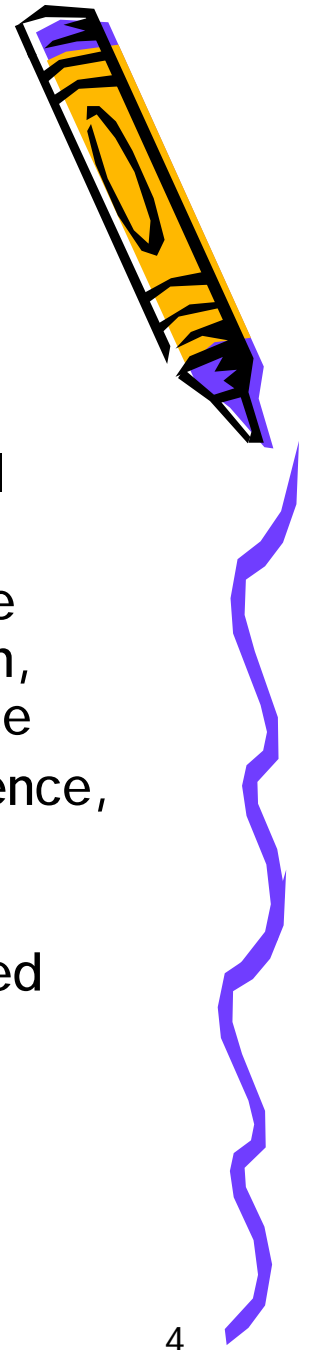
Qualitative POEM



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Characteristics of Qualitative Studies

- Theory development
- Naturalistic or organic settings
- Subjective
- Observations, interviews,
- Primarily Descriptive statistics
- Generates hypothetical propositions
- Philosophical roots: Phenomenology
- Goal: Understanding, description, generate hypothesis

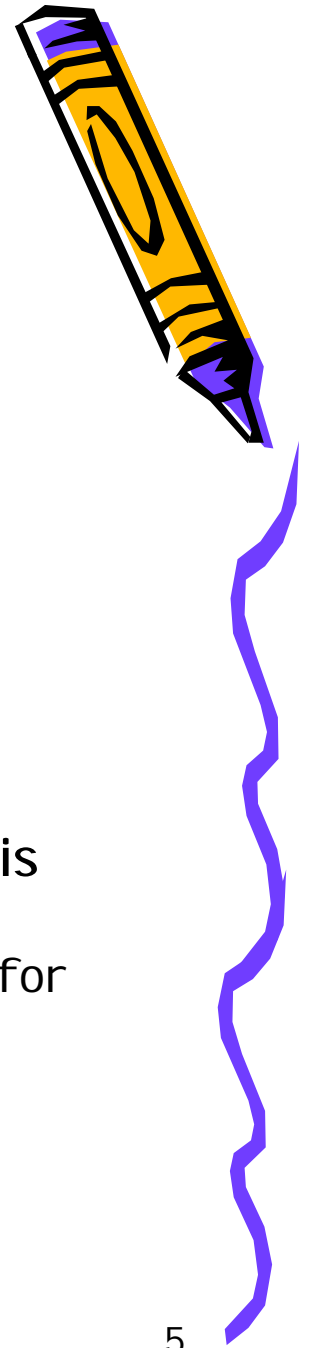
Simon, M. (2006). *Dissertation and Scholarly Research: Recipes for Success*. Dubuque, IA: Kendall Hunt Pub Co.



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Characteristics of Qualitative Studies

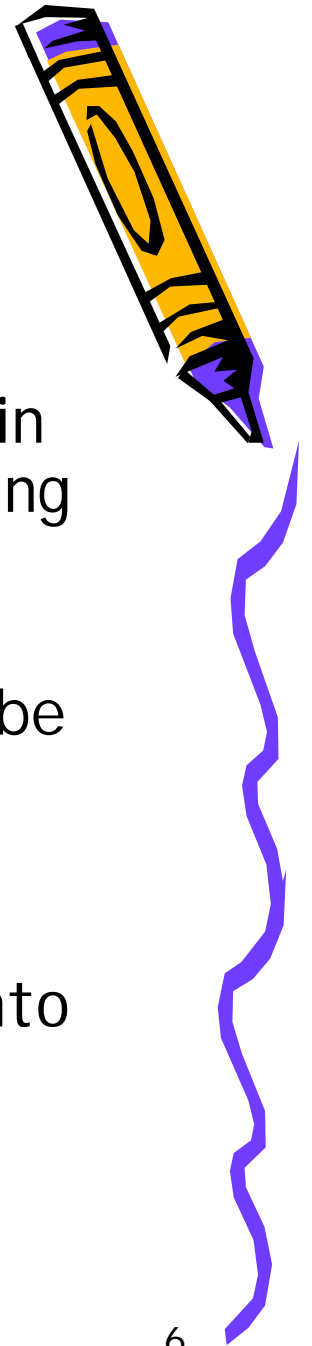
- There is a deliberate attempt to collect data in the form of descriptions and meanings; honoring the experiential component of all knowledge, participation and observation.
- Belief in multiple ways in which the world can be known.
- Purpose is to gain insight; describe events and patterns; increase understanding of ideas, feelings, beliefs and motives taking context into account



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Some Major Types of QuaLitative Studies

Past Perspective

Historical

Phenomenological

Ethnographic

Present Perspective

Grounded Theory

Case Method

Q-Method

Future Perspective

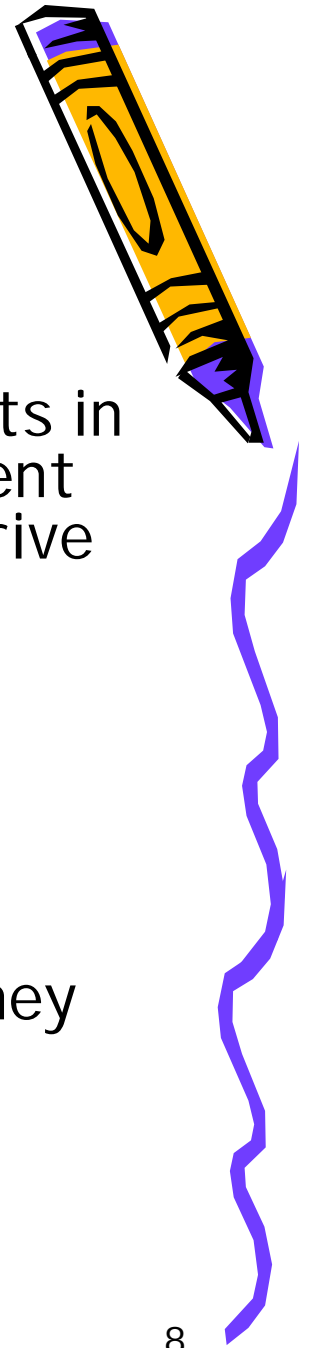
Delphi

Appreciative Inquiry



Historical Research

- The researcher looks back at significant events in the relatively distant past and seeks, a coherent and objective picture of what happened to arrive at conclusions about the causes, effects, or trends of past events that may be helpful in explaining the present or anticipating future events.
- Deals with the meaning of events.
- The interpretation of facts and events to determine not just what happened, but why they happened.



Historical Research

- Concerned with external or internal evidence and subjects the data to external or internal criticism.
- Historical research deals with the meaning of events. The principle product of historical research is context— an understanding of the organizational, individual, social, political, and economic circumstances in which phenomena occur (Mason & McKenney, 1997).
- Example: A study of 19th century teaching practices with children of low socioeconomic class using teacher diaries as primary sources.



Phenomenological Research

- The broad question that phenomenologists want answered is: "What is the meaning of one's lived experience?"
- The only reliable source of information to answer this question is the person who has experienced this phenomenon.
- Understanding human behavior or experience requires that the person interprets the action or experience for the researcher, and the researcher must then interpret the explanation provided by each person.



Phenomenological Research

- The philosophers from which phenomenology emerged include Husserl, Kierkegaard, Heidegger, Jean Paul Sartre, etc.
- Phenomenologists believe there is no single reality; each individual has his or her own reality. This is considered true even of the researcher's experience in collecting data and analyzing it. "Truth is an interpretation of some phenomenon; the more shared that interpretation the more factual it seems to be, yet it remains temporal and cultural" (Munhall & Stetson, 1989).



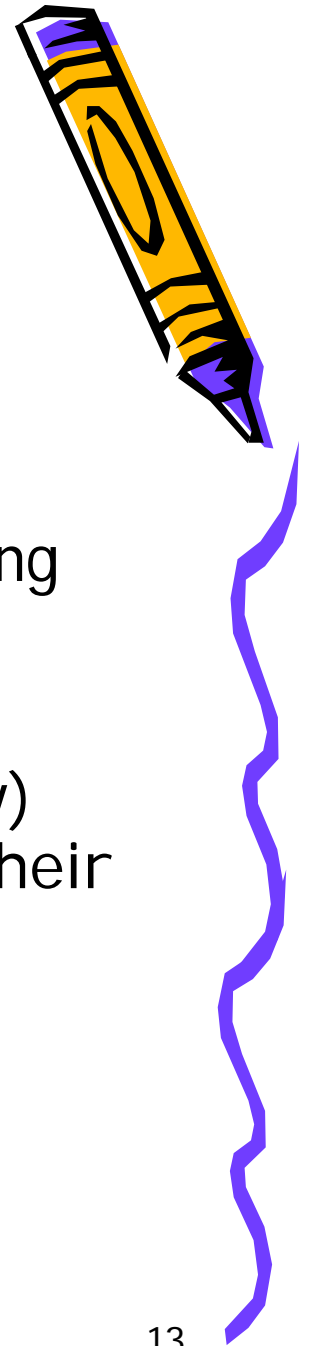
Ethnographic

- Has its roots in anthropology.
- Seeks to develop an understanding of the cultural meanings people use to organize and interpret their experiences.
- Two approaches: “emic” (studying behaviors from within a culture) or “etic” (studying behaviors from outside the culture and examining similarities and differences across cultures).
- Key Question: *What are the cultural patterns and perspectives of this group in its natural setting?*



Ethnographic

- Data are usually obtained through participant observation by the researcher or research assistant and then verified with the group living the phenomenon.
- Focuses on the culture of a group of people.
- The aim is to learn from (rather than to study) members of a cultural group—to understand their worldview as they define it.



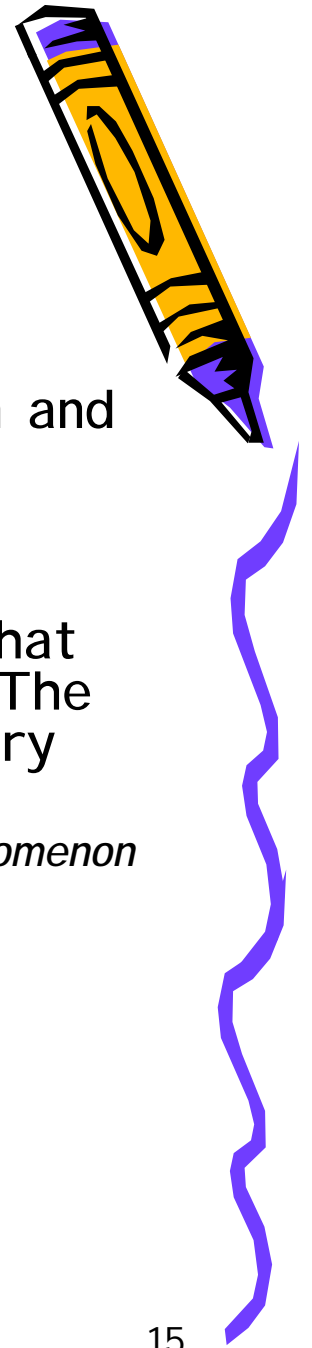
Grounded Theory

- Also known as *analytic induction*. It is explicitly emergent
- Has its roots in symbolic interactionism and philosophy and is used in areas where there is little previous research or in familiar areas in which a new viewpoint would be greatly valued.
- Each piece of datum is compared to every other piece of datum as it is collected.



Grounded Theory

- Data are usually collected by participant observation and formal semi-structured interview.
- Data are simultaneously being collected, organized, analyzed, and interpreted to form new theories
- Instead of testing hypotheses, it sets out to find what theory accounts for the research situation as it is. The aim, as Glaser (1998) noted, is to discover the theory implicit in the data.
- *Key Question: How is an inductively derived theory about a phenomenon grounded in the data in a particular setting?*



Case Method

- An empirical inquiry that:
 - investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident (Yin, 2002).
- Can be positivist, interpretive, or critical, depending upon the underlying philosophical assumptions of the researcher. Yin (2002) and Benbasat et al. (1987) advocate positivist approach, Walsham (1993) advocates an interpretive in-depth case study research.
- *Key Question: What are the characteristics of this particular entity, phenomenon, person, setting?*



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Q-Methodology

- The goal is to uncover different patterns of thought. Usually a small sample size is sufficient.
- The results of these studies are less influenced by low response rates compared with the results of survey studies.
- The qualitative component allows participants to express their subjective opinions and the quantitative methods use factor analytic data-reduction and induction to provide insights into opinion formation as well as to generate testable hypotheses.
- *Q-methodology research emphasizes the qualitative how and why people think the way they do.*



Delphi

A group of experts are asked, through a series of surveys, to make their forecasts, initially independently and subsequently by consensus, in order to discard any extreme views (Discenza, Howard, & Schenk, 2002).

A traditional Delphi method brings together panelists in at least three rounds of surveys.

During the first round, open-ended questions are sent to experts in the area of study. A second round of questions is developed based on the responses obtained in the first round of questioning.

The respondents usually rate the responses on a Likert-type scale. The third round summarizes the questions of the second round, including the group's mean response to the questions from the Likert-type scale. The panel members are asked to reconsider previous answers in reference to the group's mean and revise their answers if desired.



Delphi

- Primarily used in two modes: exploratory (to find out what's out there) and refinement (using expert judgments anonymously elicited to fine-tune quantitatively oriented estimates).
- Questions need to be neutrally phrased, and some technique or researcher oversight is necessary to control for the inclusion of mutually exclusive data components in the analysis.
- Originally developed at the RAND Corporation by Olaf Helmer and Norman Dalkey.



Appreciative Inquiry

- A form of action research that attempts to help groups, organizations, and communities create new, generative images for themselves based on an affirmative understanding of their past.
- Working from a socio-rationalist theory of change (Barrett, Thomas, & Hocevar, 1995; Bushe, 1995; Cooperrider, 1990; Gergen, 1990) these new images are expected to lead to developmental changes in the systems in which they are created.



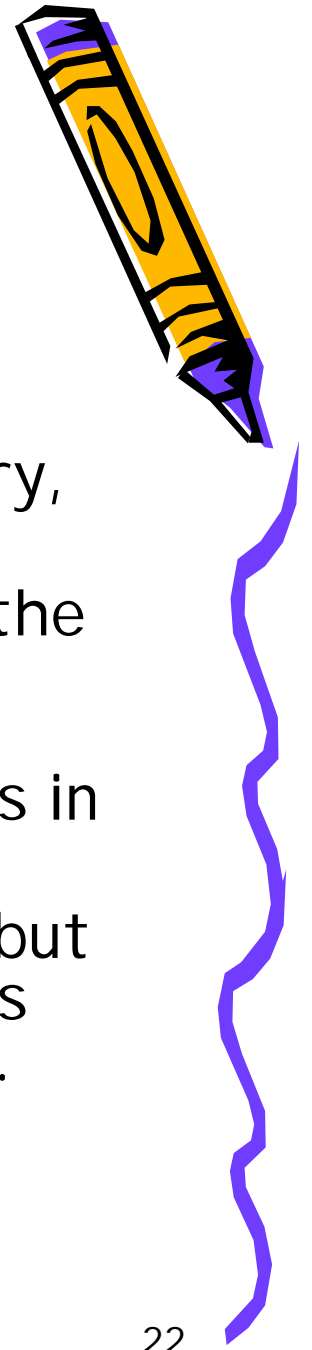
Should I do a Qualitative Study?

- Problem definition is the first step in any research study.
- Rather than fitting a technique to a problem, we allow the potential solutions to a problem determine the best methodology to use.
- Problem drives methodology...most of the time.
- **Warning:** Choice of a research topic should not be based on very personal issues, as individual passion may undermine objectivity. Do not set out to “prove” something you already know.
- Method follows (not precedes) the topic and problem under investigation.



Research Questions

- The wording of qualitative research questions utilize terms that are interpretive, exploratory, descriptive, understanding, defining, etc.
- These are terms that leave the judgment to the researcher to expand, expound, and to add emerging questions, leaving the study with a potential open end, rather than a closed end as in quantitative studies.
- It is not necessary to formulate hypotheses (but hypotheses may emerge from the data analysis and may shift during the course of the study).



Research Questions

The following are some examples of research questions for qualitative studies:

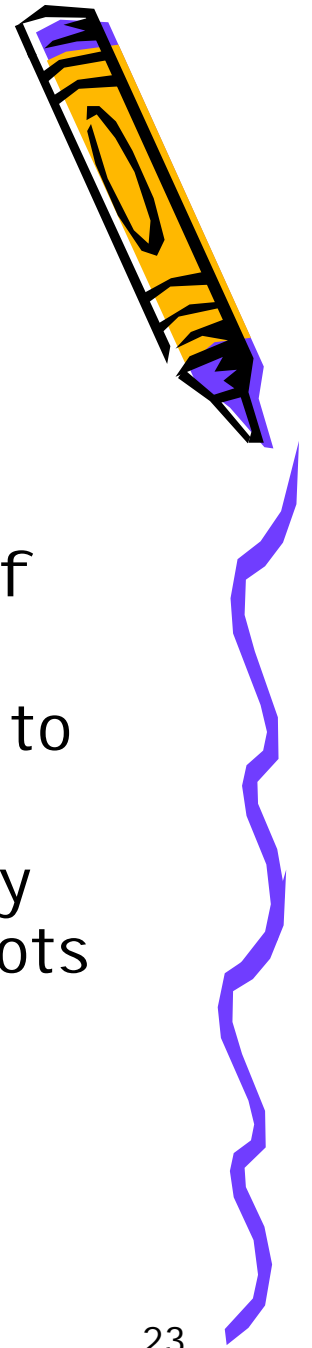
- What are the lived experiences of survivors of the tsunami (phenomenological study)?
- Why do some women leave corporate America to form their own companies (case study)?
- What emergent theory or theories explain why some victims of tragic events become grassroots leaders and others do not (grounded theory)?



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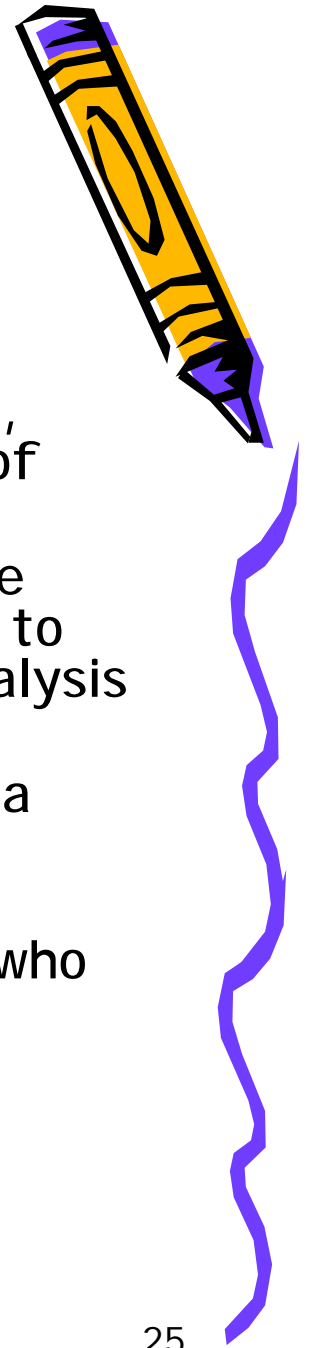
Sampling in Qualitative Studies

- Extreme or Deviant Case - selecting cases that are unusual or special
- Intensity Sample - selecting participants who permit study of different levels of the research topic (e.g. some new teachers and some veteran teachers)
- Typical Case - selecting typical cases to study
- Maximum Variation - selecting participants based on diverse variations in order to identify common patterns



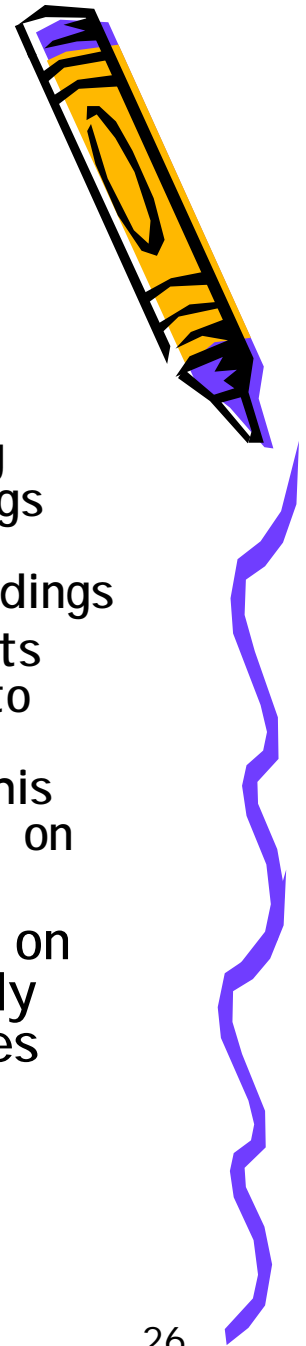
Sampling in Qualitative Studies

- *Stratified Purposeful* - selection based on subgroups, several cases at each of several levels of variation of the phenomenon
- *Homogeneous Sample* - selecting participants who are very similar in experiences, perspectives, or outlook to produce a narrow sample and make collection and analysis simpler
- *Critical Case* - selecting a single case that provides a crucial test of a theory, program or phenomenon
- *Snowball Sample* - selecting a few people who can identify other people who can identify other people who would be good participants for the study.



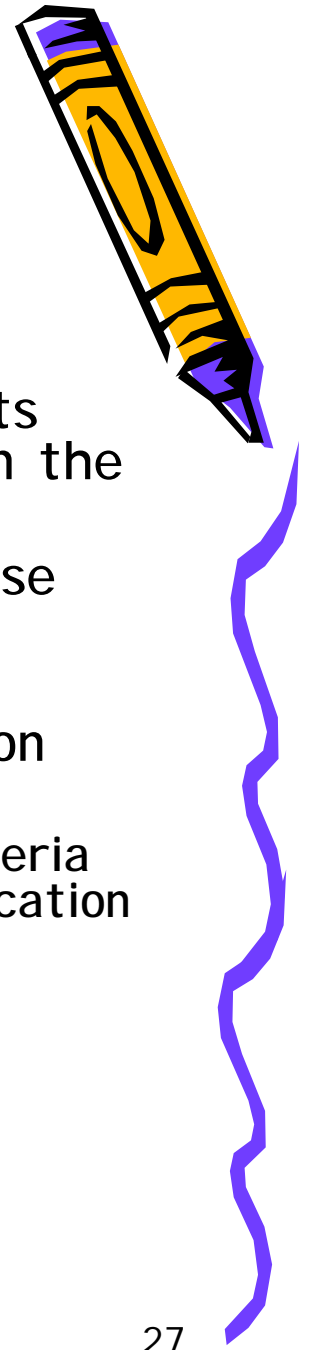
Sampling in Qualitative Studies

- Confirming and disconfirming case sample - selection of participants to look for variation or exceptions; confirming cases are selected to confirm patterns, themes or meanings found in previous cases; disconfirming cases are selected because they are believed likely to disconfirm previous findings
- Purposeful random - selecting by random means participants who were purposively selected and who are too numerous to include all in the study (e.g. randomly selecting 10 female executives from a company with 50 female executives). This approach lends credibility to the sample, but is still based on an initial sample that was purposively selected.
- In purposeful sampling, the sample should be judged on the basis of the purpose and rationale for each study and the sampling strategy used to achieve the studies purpose.



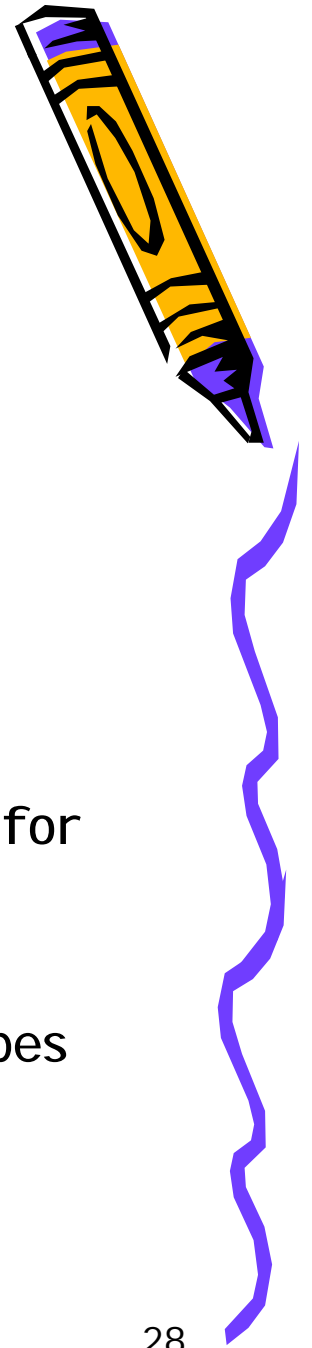
Sampling in Qualitative Studies

- *Politically important sample* - selection of participants who are well known and would create wide interest in the study
- *Convenience sample* - selection of participants because they are available and easy to study (this strategy should be avoided).
- *Opportunistic sample* - selecting participants based on taking advantage of unexpected situations.
- *Criterion Sample* - selecting all cases that meet some criteria or have particular characteristics (e.g. Latino Special education females in an inclusion program).



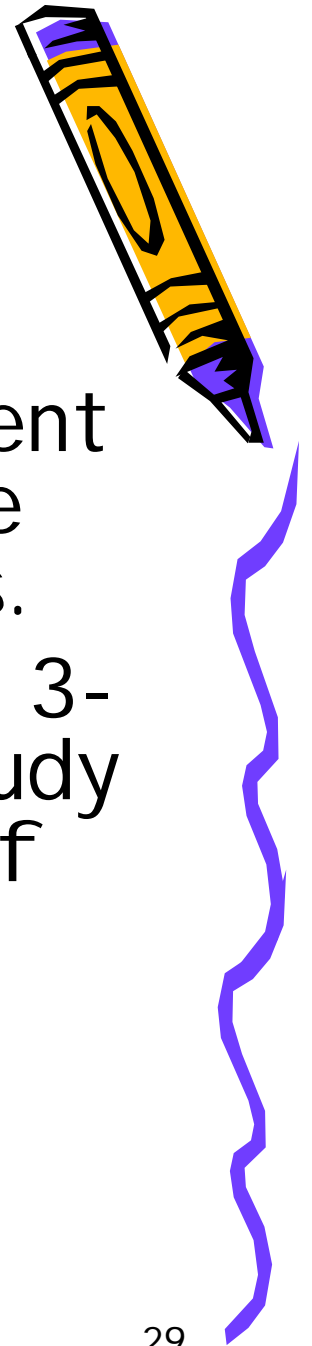
Sample Size in Qualitative Studies

- There are no definite rules to be followed.
- It will depend on:
 - what you want to know
 - the purpose of the inquiry
 - what will be useful
 - what will have credibility and
 - what can be done with available time and resources.
- identify cases that possess relevant characteristics for the question being considered. This process should nevertheless be systematic and not based on convenience.
- One indicator could be the sample size of similar types of published studies.



Sample Size

- Although there is no total agreement on the sample size for a qualitative study, there are several guidelines.
- Creswell (2002) recommends that 3-5 participants be used for case study research, along with other types of data.



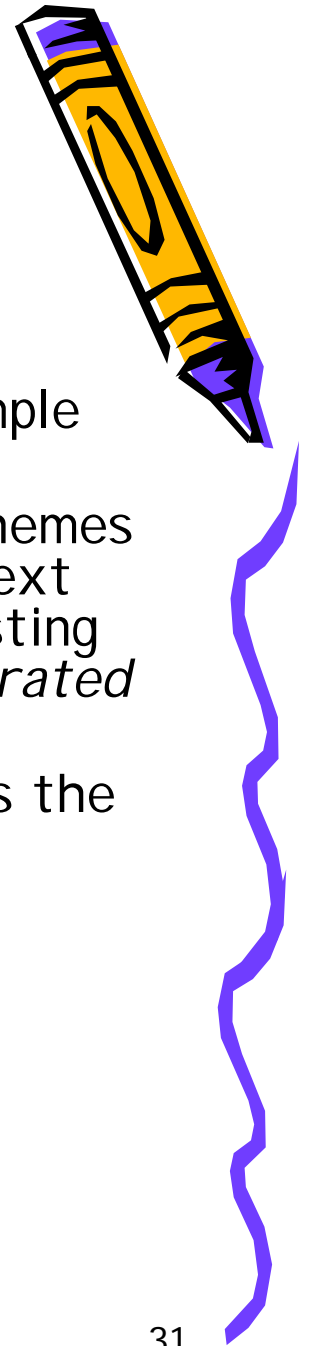
Sample Size

- With respect to phenomenological studies, sample size recommendations range from 6 (Morse, 1994) to 10 (Creswell).
- For grounded theory research, sample size guidelines have ranged from 15-20 participants (Creswell) to 20-30 participants (Morse).
- With regard to ethnographic Morse suggests that 30-50 interviews need to be conducted.



Sample Size - Saturation

- The completion of data collection and the resulting sample size may be the result of data saturation.
- After *enough* data have been collected to determine themes or categories, the researcher may decide that if the next few participants' experiences are captured by the existing themes or categories, the phenomenon of study is *saturated* or complete.
- This means that the researcher's construct represents the phenomenon of study, and no further data collection is necessary



Qualitative Data

Tends to be very detailed.

According to Guba (1978), qualitative researchers have few strict guidelines for when to stop the data collection process.

Criteria include (1) exhaustion of resources; (2) emergence of regularities; and (3) overextension, or going too far beyond the boundaries of the research. (4) Saturation - no new themes emerging.

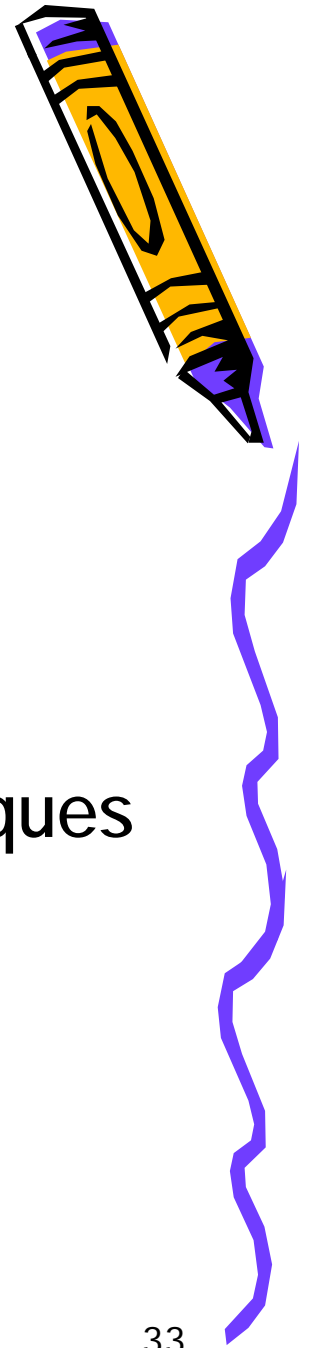
The decision to stop sampling must take into account the research goals, the need to achieve depth through triangulation of data sources, and the possibility of greater breadth through examination of a variety of sampling sites.

Data are documented through interview transcripts, field notes, brochures, e-mails, and memos.



Interviews

- Interviewing is used to gather information in the participants own words.
- Qualitative researchers generally use open-ended informal interview techniques (and generally do NOT use fixed-response questionnaires or surveys).



Interviews

- Participants are encouraged to talk about experiences, feelings, beliefs. The most important characteristic of a good qualitative interviewer is to be a good listener.
- Interviews can vary from informal conversations to open-ended interviews to in-depth discussions with key informants. Sometimes structured interviews are conducted to compare views across different participants, groups, or settings.
- Interviews also vary in that there may be one-time interviews, multiple interviews with the same participant, multiple interviews with various participants, or group interviews.



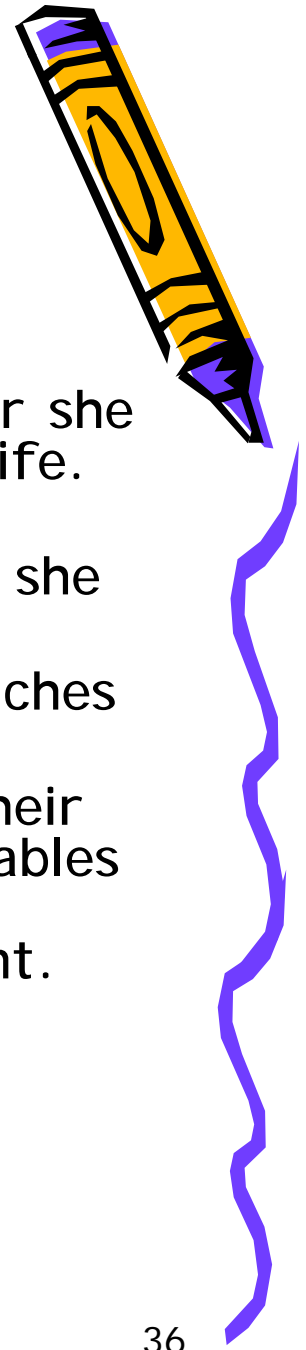
General guidelines for interviewing

- Listen more, talk less, don't interrupt.
- Follow up on what participants say -- ask questions when you don't understand.
- Avoid leading questions -- ask open ended questions.
- Keep participants focused and ask for concrete details.
- Tolerate silence.
- Don't be judgmental about participants' beliefs or views.
- Don't debate with participants over their views. You are a recorder and learner, not a debater.



Observation

- Goal is to immerse researcher in the setting so he or she can see, hear, feel, experience, participants' daily life.
- The *participant-observer* participates fully in the activities of the group but also makes it clear he or she is doing research
- The *unobtrusive or Non-participant Observer* - watches but does not participate in group activities.
- The naturalistic observer - observes individuals in their natural settings, makes no effort to manipulate variables or control activities -- simply observes and records.
Example: observation of students at an athletic event.



Field Notes

- Written descriptions of people, events, objects, places, activities, conversations, etc.
- These notes may supplement information from official documents and interviews or may comprise the main research data.
- Field notes should also include the researchers' reactions, reflections, and tentative assumptions.
- Recording events or interviews makes it less necessary to take extensive field notes.



Verification

- The credibility criterion is similar to internal validity, with the focus of establishing a match between the responses of the experts (e.g., teachers, administrators, and parents in an educational study) and those realities represented by the evaluator and designer of the instrument (the researcher and the participants in this study).
- Persistent observation (Guba & Lincoln, 1986, pp. 303–304) requires sufficient observation to enable the evaluator to identify those characteristics and elements in the situation that are most relevant to the issue being pursued and to focus on the details.
- A member check is the process of verifying information with the targeted group. It allows the stakeholder the chance to correct errors of fact or errors of interpretation. Member checks add to the validity of the observer's interpretation of qualitative observations.



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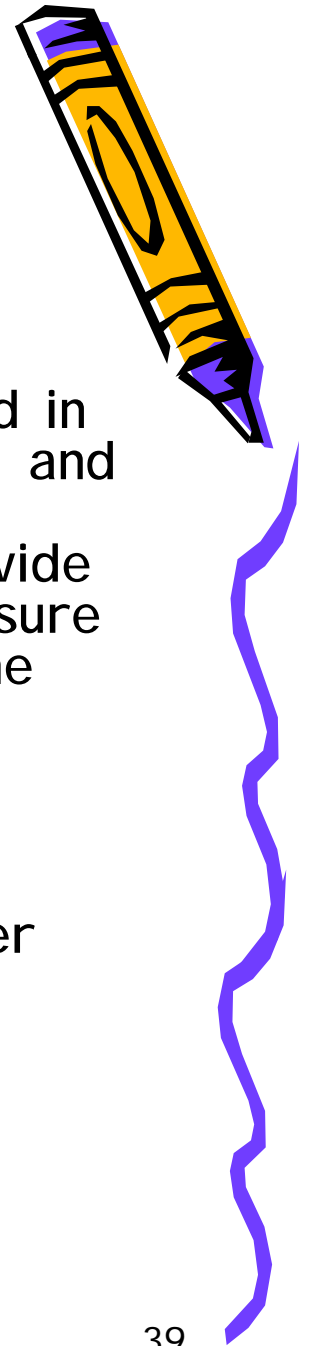
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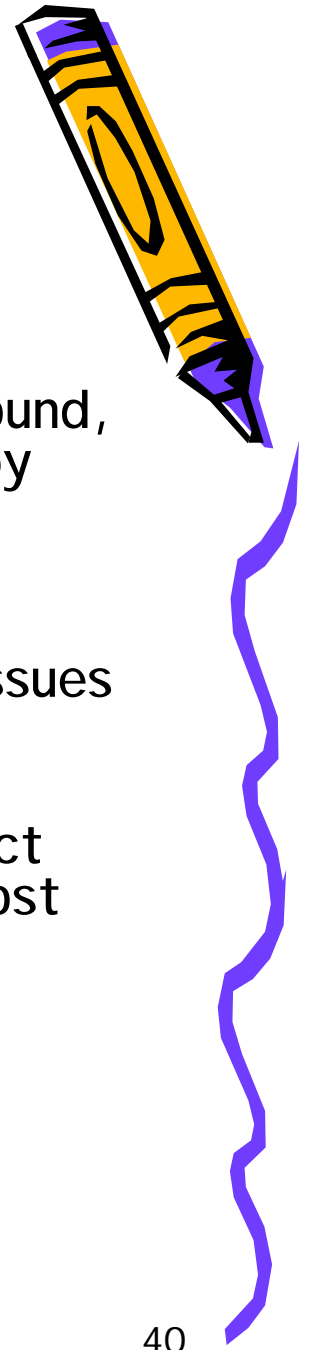
Verification

- Expert review is a primary evaluation strategies used in both formative (How can this program be improved?) and summative (What is the effectiveness and worth of program?) evaluation. It is often a good idea to provide experts with some sort of instrument or guide to ensure that they critique all of the important aspects of the program to be reviewed.
- The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information-richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size.



Qualitative Analysis

- For qualitative data collected by text, images, or sound, an excellent software program like NVivo, created by QSR International (Richards, 2002).
- The program allows the data to be examined at increasing levels of understanding and generate an informed range of alternative solutions to complex issues and problems facing the qualitative researcher.
- Data Sense < <http://www.datasense.org/> > offers excellent face-to-face and online training and project consultation to individuals and groups utilizing the most current version of QSR software.

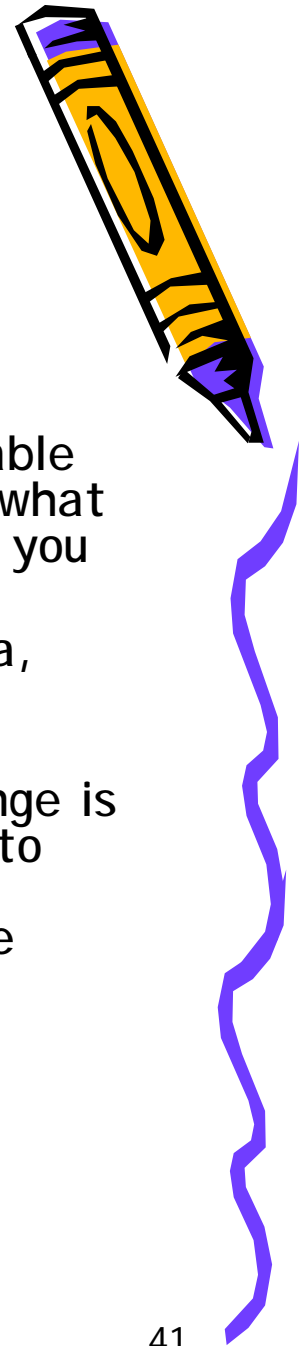


Data Analysis

Bogdan and Biklen (1982) define qualitative data analysis as "working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others" (p. 145).

Qualitative researchers tend to use inductive analysis of data, meaning that the critical themes emerge out of the data (Patton, 1999) to form models, theories, concepts,

Qualitative analysis requires some creativity, for the challenge is to place the raw data into logical, meaningful categories; to examine them in a holistic fashion; and to find a way to communicate this interpretation to others. The role of the researcher in the data collection procedure should be described.



Data Analysis

- Data analysis is:
 - Ongoing
 - inductive
 - constant-comparative
 - synthesized
- Yields verbal descriptions derived from interviews and observational notes.
- Notes and transcripts are analyzed for themes and patterns which are described and illustrated with examples, including quotations and excerpts
- Coding of data and verbal synthesis.



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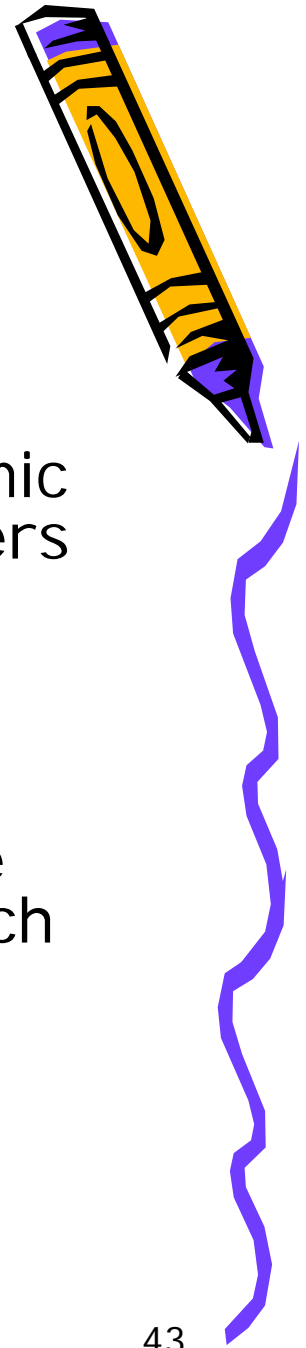
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Reporting

- The researcher should describe the sample in regards to gender, ethnicity, age, socioeconomic class, and any other relevant criteria so readers can understand how and why this sample was chosen.
- Many strategies influence sample size and selection. The researcher must document the decision-making process involved in qualitative sampling to provide credibility for the research findings.



Reporting

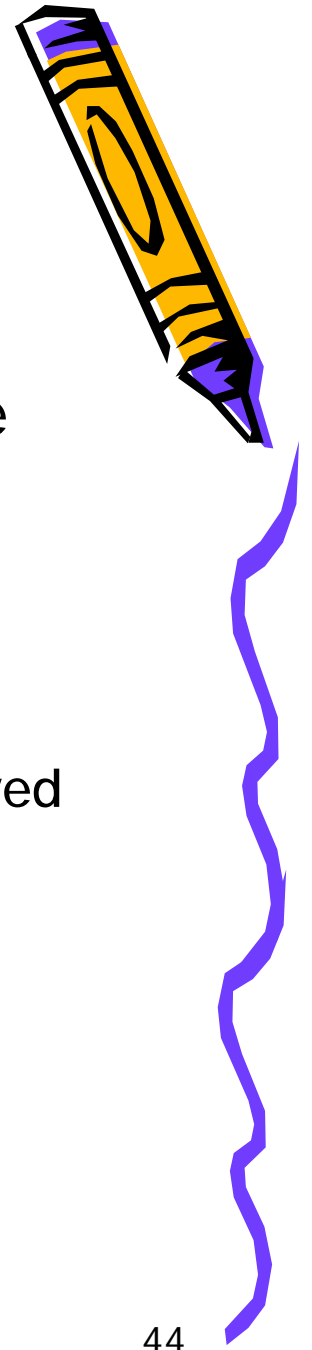
- Findings should be discussed in relation to the literature.
- Be true to the methodology:
 - Grounded - use different coding (open, axial, selective)
 - Phenomenology - state which form: Husserly, Heidegger, Gadamer, ??? Focus on meaning of lived experiences. Use participants voice.
 - Ethnography - Include observations, interviews, archived documents or artifacts, include cultural behavior.
 - Case Study - multiple sources of data, describe themes and assertions, relate to literature.



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Limitations of Qualitative Studies

- Subjectivity: The researcher has substantial control over both the design and the analysis and the study is influenced by the researcher's perceptions.
- Limited Generalizability: The unique features of the setting or individuals studied makes it difficult to generalize. Qualitative researchers argue that all social structures are unique and therefore generalizing is an inappropriate standard by which to judge qualitative research.



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