

Purposes of Research

1. Identify general patterns & relationships
 - involves measurement and/or counting
 - Popular goal for health research
 - **Quantitative**
2. Test and refine theories
 - Testing a tentative theory
 - Reserachers may need to refine a theory to include for exceptions
 - Relationships between variables
 - **Quantitative goal**
3. Make predictions
 - you have a theory
 - theory is used to make predictions
 - monitor predictions
 - **Quantitative reaserch.**
4. Interpret culturally or historically significant phenomena
 - Interpret events/activities
 - Meaning
 - Peoples experiences
 - **Qualitative research**
5. Explore diversity
 - show the diversity of peoples opinions/experiences
 - Identifies unusual cases and describes them
 - **Qualitative Research**
6. Give voice
 - Talk to people who are often overlooked
 - Give voice to people who typically don't have a say
 - Their voice is hear on its own – not compared to mainstream
 - The research participants tells the researcher what the issues are
 - **Qualitative research**
7. Advance new theories
 - You don't have a theory to begin with
 - You end up with a theory at the end of your project (inductive research)
 - Theories can be developed about complex human behaviours and social settings.
 - **Qualitative Research**

Approaches to research often have mixed methods and can sometimes use both qualitative and quantitative research.

Qualitative analysis

A 'case' is unit of analysis or aspect being examined by a researcher. If people's attitudes towards physical activity are being investigated, then

'people' are the case. If you are investigating a policy that contains threats to human beings, 'policy' is the case.

Qualitative research often explores several aspects of a case and a limited or small number of cases. In the above example a qualitative researcher might interview a small group of people (say 10 people) and explore their attitudes to physical activity in many ways. The researcher might look at the reasons behind the participant's decisions to exercise (or not exercise). The researcher could also explore aspects such as the participant's attitudes towards using a gymnasium for example; or their attitude towards other people who do (or do not) participate in sport. The data collected would be detailed and rich but would only pertain to a small sample of people.

In contrast, quantitative analysis the number of cases examined tends to be much larger (could be hundreds or thousands) and the aspects of the cases examined tend to be more limited (there may even be only one aspect examined). For example a survey distributed to residents of a town examining the number of hours per week participants spend doing physical activity. The data collected may be more limited in terms of the aspects examined but the data collected would relate to a LARGE sample of people.

Types of Qualitative research designs

Each design type is used to answer different types of qualitative questions.

Grounded Theory

Main goal is advancing new theories and giving voice to people. Allows researchers to build a theory from the ground up.

- In grounded theory, research questions are stated rather than hypotheses (hypotheses are normally proposed at the start of a quantitative experimental study) (Skeat 2010).
- The question must be flexible and open-ended in order to allow a theory to emerge.
- The question must be sufficiently broad to allow the subject matter to be systematically studied in depth.
- Grounded theory explains the main concern of the participants and shows how this concern is resolved or managed.

Ethnography

Aims to provide an in depth description of daily life for individuals, groups or cultures, and to explain how these create meaning for those involved. It requires the use of observation in order to understand the culture being studied and its setting. Used in many different industries

Phenomenology

Phenomenological research is used to answer questions of meaning ... to **understand an experience as it is understood by those who are having it** (Cohen, Kahn, & Steeves, 2000, p. 3). Researchers interpret the experiences through the eyes of the participant. Phenomenology usually involves carrying out long detailed interviews to investigate the experiences of the study participants.

Examples of Phenomenological Research Questions

- What does it feel like to lose weight?
- Why do you think you smoke?
- Why did you choose one form of contraception over another?

Phenomenology is concerned with what **meaning people make of events, places and circumstances** as people can have different interpretations of the same event, object or activity.

In qualitative research the aim is not to prove people right or wrong, or say that their point of view is not important. You aim to show what different meanings, interpretations or views exist.

	Aim	Data Collection	End Product
Grounded Theory	Gives voice to participants and researcher builds theory	May use a mixture of data collection methods	Proposed theory based on data collected
Ethnography	Researcher sees the natural setting/culture first hand	Observation	Unbiased (hopefully) picture/snapshot of daily life of a particular group/culture
Phenomenology	Identify meanings people attach to their experiences	In-depth interviewing	Rich description of meanings individuals/groups attach to their own e. <small>Comparison Table</small>

Sampling

- Examines cases of interest
- Not practical to include every case in the population
- Instead we sample
- Sample = Subset of population
- Defined by criteria
- Sampling: Process of recruiting/selecting participants

The two types of sampling

1. Probability sampling

- Research participants are randomly selected (every participant has equal chance of being selected)
- No systematic bias
- Chance determines the research participants
- Likely to be representative of the population
- Often used in quantitative research

2. Non probability sampling

- Participants selection procedure are NOT random
- Participants are not representative of the population from which they are selected

- Results are not generalizable
- Useful for research which does not involve large populations
- Useful for qualitative research

The four types of non probability sampling

1. Convenience Sampling – involves selecting a sample from convenient location without considering the degree to which the sample is representative.
2. Quota Sampling – A form of convenience sampling. Individuals who have certain characteristics of interest are selected from the convenient location until the required sample size is reached.
3. Purposive Sampling - Purposive sampling involves the researcher making a decision about who will be able to provide the desired information and only sampling from these identified individuals.
4. Snowball Sampling - Snowball sampling involves using networks to identify a sample. So you start with a few individuals who meet the criteria to participate in your study. After collecting the necessary information from these individuals, they are asked to identify other individuals who meet the sampling criteria.

Data Collection

Researchers can use existing data – avoids time consuming and expensive process of data collection

OR

Researchers can collect first hand or primary data.

OR

Both!

Qualitative Data Collection Methods

Interviews

- A verbal interchange in which the interviewer seeks to gain information about a person's beliefs, or opinions.
- Interviews can be unstructured or semistructured
 - Unstructured open ended interviewing can be used to gain a person's subjective experiences. This encourages a participant to define important dimensions of a phenomenon and elaborate on what is important to them.
 - Semi structured interviewing also involves an in depth interview but also uses an interview schedule. An interview schedule contains some open ended questions that can be used to guide the interview.

Focus Groups

- Like interviews but involve a group of people (5-8) who take part in a discussion about the research topic. Focus groups can either be unstructured or semi-structured and offer in depth discussion.
- An advantage of this is it allows for observation of group dynamics and interaction

- One of the disadvantages is they do not explore individual experiences.

Observation

- Observation is another qualitative research data collection method – but by 'looking' rather than 'listening'.
- **Participant observation** is a period of intensive social interaction between the researcher and the participant in his/her environment.
- Examples of participant observation include:
 - a hospital ward
 - a self-help group
 - a sporting club
 - a classroom
 - a therapy group
 - a supermarket
 - a playground.

Data Triangulation

Data sources which are **triangulated** refers to using more than one method of gathering data to create a more complete picture of the subject under investigation (McBrien 2008).

Examples include:

- participant observation and interviews
- focus group interviews and semi-structured interviews
- interviewing key informants as well as participants
- interviews conducted by a number of different researchers.

This allows for a broader impression of the research topic.

Data Analysis

"Coding is a procedure that disaggregates the data, breaks it down into manageable segments, and identifies or names those segments."
(Schwandt, 2001, p. 26)

Data can be sorted so that similar topics are together. The topics are usually the key themes that emerge from the data.

Other techniques qualitative research has used in the past includes:

- using different colour highlighters and having one colour for each code
- cutting up the transcript and putting each section into an envelope with the code name on it
- opening different documents in MS Word, making the filename for each document the name of the code and cutting and pasting sections of the transcript into each one
- using a computer program to assist in coding and analysing the data.

Completing the Analysis

The next step is to represent the study in the form of a report, journal article, conference paper or lecture.

Qualitative writing differs from quantitative writing, for example;

- qualitative data are more difficult to condense
- detailed descriptions are often required for the reader to make more sense of a research setting
- qualitative researchers tend to explain their methods at greater length
- the goals of qualitative studies tend to be inductive; i.e. construct new theories, which requires detailed descriptions
- the style of the writing is such that there is more freedom to practice 'literary license' to keep the reader interested!
- the language is not as formal as in quantitative writing.