



# Designing Your Qualitative Research

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23 November 2022



# About Me

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## **Experience**

1988 – 2001 : held several positions in financial institutions and public listed companies, as Internal Auditor, Corporate Services, Financial Controller, etc.

1999 – 2014 : start-up company involved in knowledge management, digital libraries, web-based applications, and search and retrieval systems. Market video conferencing products, ADSL, VOIP, RFID, satellite telephony, hardware, software and networks.

2014 – 2018 : Universiti Malaysia Kelantan

2018 – present : Putra Business School

## **Research area**

Knowledge Management, Information Systems, Artificial Intelligent Systems, Knowledge Modelling, Financial Technology, Business Analytics, Entrepreneurship.

# Preparing for Research

# What is research?

- Philosophia (Greek) means "**love of wisdom.**"
- Philosophy - activity people undertake to understand fundamental truths about themselves, the world in which they live, and their relationships to the world and to each other.
- **Research is a process that people undertake in a systematic way to find out things and increase their knowledge.**

# *Laying* the foundations for analysis

- Preparation for analysis **begins** when your research **begins**.
- Analysis will be laid based on the ontology and epistemology of the phenomena.
  - **Ontology** - the philosophical study of being; i.e., what applies neutrally to everything that is real.
  - **Epistemology** - the theory of knowledge; i.e., it is concerned with **the mind's relation to reality** (ontology).
- The ontology and epistemology are more implicit, rather than explicit.
- They are codified to become the **methodology** – a method how to work the research.
- Research **methodology** is the specific procedures or techniques used to identify, select, process, and analyze information of the research.

# Ontology

- **Ontology** means the things (and the characteristics/ features of the things) that can exist in the world (natural, physical or abstract).
- ***Concerned with the nature of reality and what is there to know about the world (i.e., phenomena).***
- Two overarching ontological positions that shape social science – ***realism*** and ***idealism***.
  - **Realism** – based on the idea that there is an external reality which exists independently of people's beliefs about or understanding of it.
  - **Idealism** – asserts that reality is fundamentally mind dependent and no reality exists independent of human mind or socially constructed meaning.

# Ontological positions

<b>Realism</b>	<b>An external reality exists independent of our beliefs and understanding</b>
<b>Naive realism or shallow realism</b>	Reality can be observed directly and accurately (Madell et al., 2000; Blaikie, 2007)
<b>Cautious realism</b>	Reality can be known approximately or imperfectly rather than accurately (Blaikie, 2007)
<b>Depth realism, critical or transcendental realism</b>	Reality consists at different levels; i.e., the empirical domain that made up of what we experience through our senses, the actual domain that exists regardless of whether or not it is observed, and the real domain that refers to underlying processes and mechanisms (Blaikie, 2007; Bhaskar, 1978; Robson, 2002)
<b>Subtle realism</b>	An external reality exists but is only known through human mind and socially constructed meanings (Blaikie, 2007; Hammersley, 1992)

# Ontological positions

<b>Idealism</b>	<b>No external reality exists independent of our beliefs and understandings</b>
<b>Subtle or contextual or collective idealism</b>	The social world is made up of representations constructed and shared by people in particular contexts (Hughes & Sharrock, 1997; Madill et al., 2000; Shaw, 1999)
<b>Relativism or radical idealism</b>	There is no shared social reality, only a series of different (individual) constructions (Hughes & Sharrock, 1997; Madill et al., 2000; Shaw, 1999)

# Epistemology

- **Epistemology** ask about the basis of knowledge.
- **Epistemology is the study of knowledge.**
- **It is concerned with ways of knowing and learning about the world.**
- Epistemology focuses on issues such as:
  - *How we can learn about reality,*
  - *What forms the basis of our knowledge.*

# Epistemological positions

<b>Inductive logic</b>	Building knowledge bottom up through observations of the world, which in turn provide the basis for developing theories and laws
<b>Deductive logic</b>	Top down approach, starts with a theory from which hypotheses are derived and applied to observations
<b>Retroductive logic</b>	The researcher identifying the structures or mechanisms that produce patterns in data, trying different models for 'fit'
<b>Abductive logic</b>	Abducting or using the researchers' categories, from participants own account of everyday activities, ideas or beliefs.

# Epistemological concepts

<b>Foundational model of research-based knowledge</b>	Assumes that it is possible to 'mirror' reality accurately
<b>Fallibilistic model of research-based knowledge</b>	Treats all knowledge claims as provisional
<b>Knowledge as 'value-mediated'</b>	Holds that all knowledge is affected by the values of the person who produces or receives it
<b>Correspondence theory of truth</b>	Often associated with realism, states that a statement is true if it matches independent reality
<b>Coherence theory of truth</b>	States that an account is true as a representation of the world if it is supported by several other accounts (if different accounts 'cohere' with each other)
<b>Pragmatic theory of truth</b>	Beliefs are true if they have practical utility

# Designing Qualitative Research

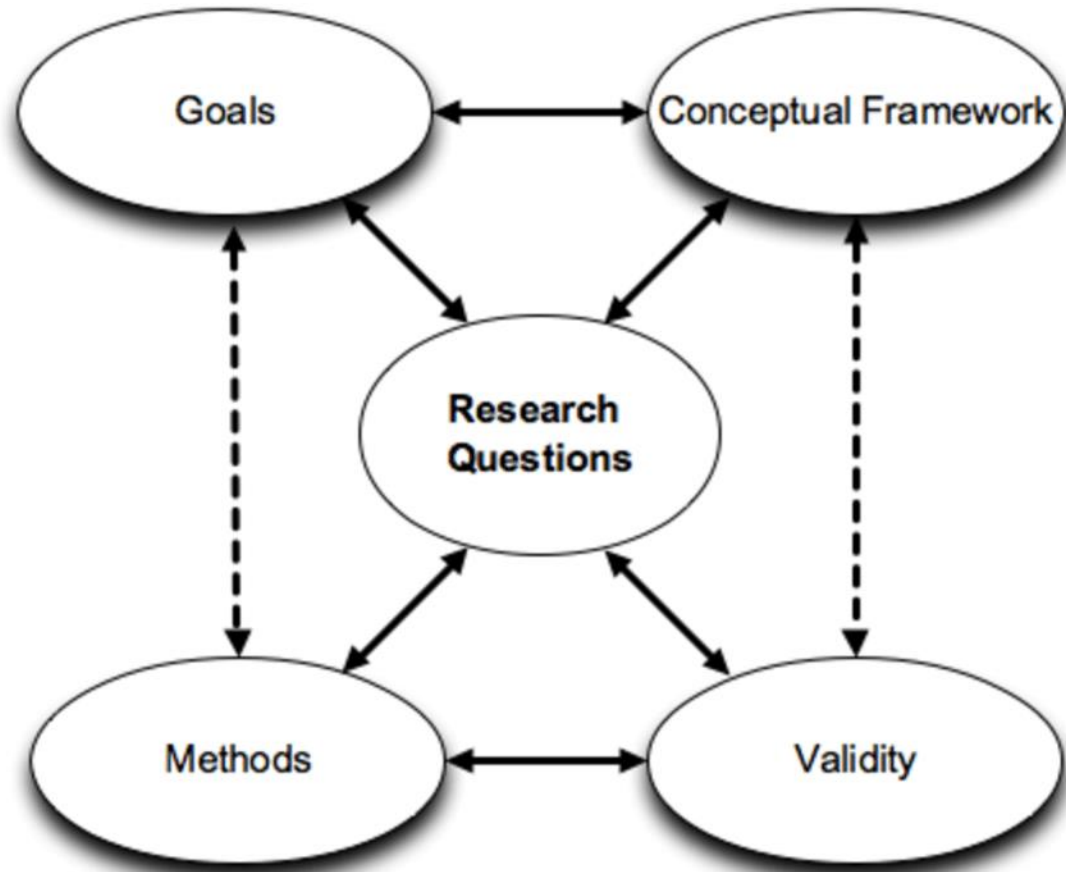
# Qualitative Research

- Qualitative research is data driven, NOT theory driven
- It applies the inductive logic (epistemological position)
- Explore a problem through obtaining a detailed understanding of a central phenomenon
- Have the literature justify the problem and play a minor role
- State the purpose and research questions in a general, open-ended way

# Model for Qualitative Research Design

- A good research should start with a good research design.
- Qualitative researches need to be flexible rather than fixed (Robson (2011)).
- Maxwell (2012) - **qualitative research as inductive** rather than following a strict sequence.
- The Maxwell Interactive Model - a systematic, interconnected and flexible research design - creates a coherent and workable relationships among the research components.

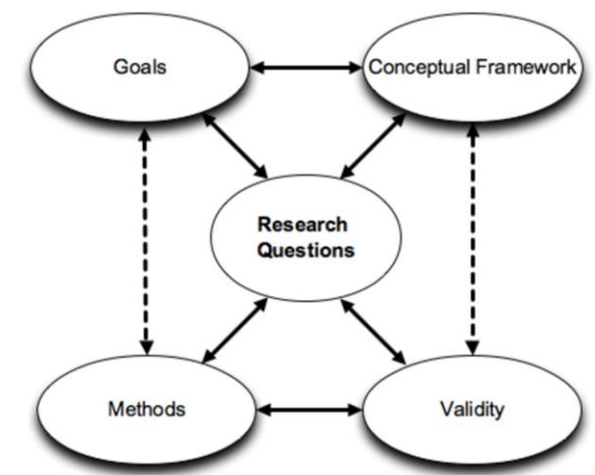
# Maxwell Research Design



- Goals
- Conceptual Framework
- Research Questions
- Methods
- Validity

# Goals

- Why is your research worth doing?
- What issues do you want to clarify with the research?
- What practices and policies do you want the research to influence?
- Why do you want to conduct this study?
- Why should other people care about the results of your research?



# Goals

- Maxwell (2012) listed three different kinds of goals for doing a research:
  - **Personal goals** - *things that motivate the researcher to conduct the study, but might not be important to others. Include the desire to change or improve some situation that the researcher is personally involved in, curiosity about a specific issue, and others.*
  - **Practical goals** - *focused on accomplishing something, such as meeting some needs, changing some situation, or achieving some objectives.*
  - **Scholarly or intellectual goals** - *focused on understanding something, gaining insight into what is going on, and answering questions that previous researches has not adequately addressed.*

# Goals

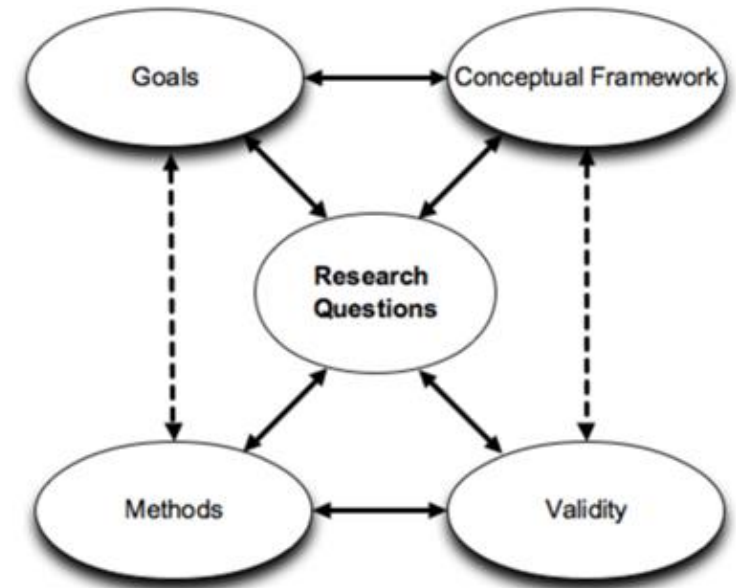
- Five kinds of intellectual goals
  - *Understanding the meaning of the events, situations, experiences, actions, etc.*
  - *Understanding the particular context within which the participants act, and the influence that this context has on their actions.*
  - *Understanding the process by which the events and actions take place.*
  - *Identifying unanticipated phenomena and influences, and generating new “grounded” theories*
  - *Developing causal explanations.*

# Functions of Qualitative Research

<b>Contextual research</b>	Concerned with identifying what exists in the social world and the way it manifests itself
<b>Explanatory</b>	Concerned with why phenomena occur, and the forces and influences that drive their occurrence
<b>Evaluative</b>	Concerned with how well things work, contribute to an understanding of outcomes by identifying the types of effects or consequences
<b>Generative</b>	Concerned with producing new ideas as a contribution to the development of a social theory or to the refinement of policy solutions.

# Conceptual Framework

- What do you think is going on with the issues, settings or people you plan to study?
- What theories, beliefs and prior research findings will guide your research?



# Conceptual Framework

- Your conceptual framework need to be constructed from:-
  - *Your experiential knowledge,*
  - *Existing theories and researches that are relevant to what you plan to study,*
  - *Your pilot and exploratory research,*
  - *Thought experiments,* and
- Critically examining each idea, and
- To draw from them the conceptual framework based on your philosophical and methodological paradigms.

# Experiential knowledge

- Researcher is the instrument of the research.
- According to Mills (2000), the most admirable scholars do not split their work from their lives, *they use both to enrich each other.*
- Separating your research from other aspects of the researcher's life cuts the research from a major source of insights, hypotheses, and validity checks.
- Strauss (1987) referred to technical knowledge, research background and personal experiences as "*experiential data*" which should not be ignored.

# Prior theory and research

- Prior theory and research are other people's theories and researches in general.
- The purpose is to provide a model or map of why the world is the way it is (Strauss, 1995).
- It is a simplification of the works aimed at clarifying and explaining some aspects of how it works (Maxwell, 2012).

# Prior theory and research

Prior researches helps researchers to:

- develop a justification for their study; i.e., how the research can address an important need or unanswered question,
- can inform the researcher's decisions about methods, suggesting alternative approaches or identifying potential methodological problems or solutions,
- can be a source of data that can be used to test or modify their theories,
- can help the researcher to generate theory.

# Pilot and Exploratory Studies

- Researchers may design *pilot studies* specifically *to test their ideas or methods* and also *explore the implications*, or even *to inductively develop a grounded theory*.
- From the pilot study, qualitative researchers can *develop an understanding of the concepts and theories* held by the people they are studying.

# Thought experiments

- Thought experiments challenge the researchers to come up with some ***plausible explanations for their observations;*** and ***to think whether to support and disprove the explanations.***
- It is ***drawn from both theory and experience*** and ***to explore the logical implications*** of the researcher's models, assumptions and expectations of the things that they want to study.
- All theory building involves thought experiments to some extent; they ***can generate new theoretical models and insights,*** and test the current theory for problems.

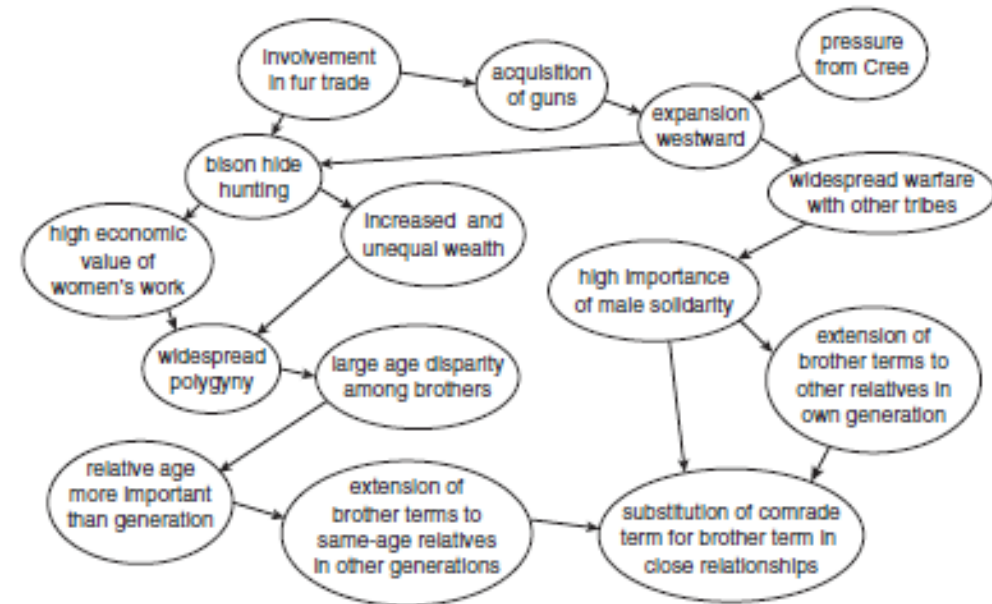
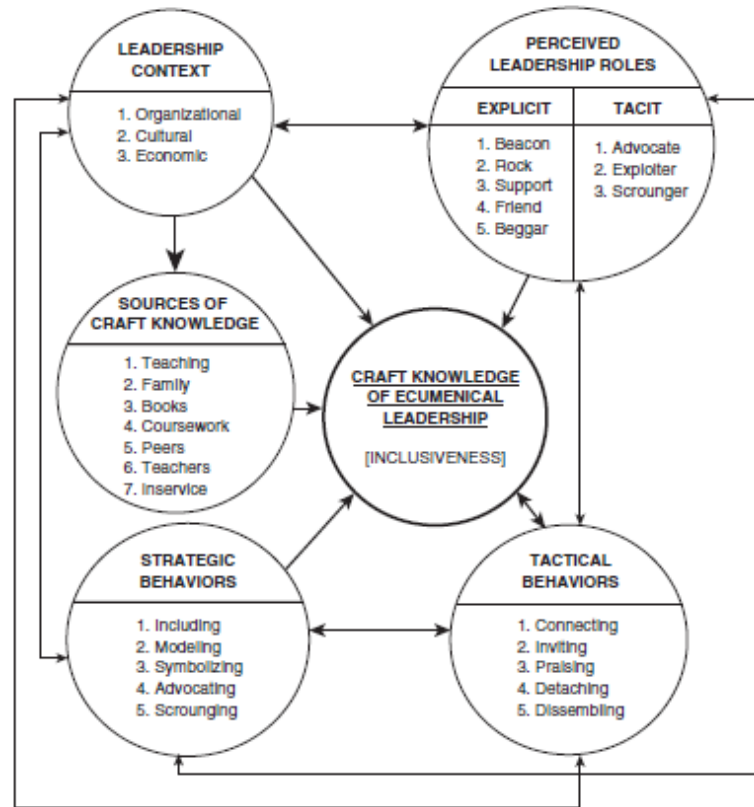
# Concept Map

- A concept map of a theory - ***a visual display of that theory***, it is a ***tool for developing and presenting the conceptual framework*** of the researcher's design.
- It ***consists of concepts and relationships*** among the concepts.
- In order to develop a concept map, first the researcher need to have a set of concepts to work with.
- These concepts ***can come from existing theory***, from the ***researcher's own experience*** or ***from the people the researcher are studying***.

# Concept Map

- There are several strategies to develop the map, including:
  - begin with the **keywords** that could represent important concepts in the theory,
  - **extract something that the researcher has written about** and try to **map the theory**,
  - take a **key concept, idea or term** and **brainstorm the concepts** that might be relevant.

# Example Conceptual Frameworks



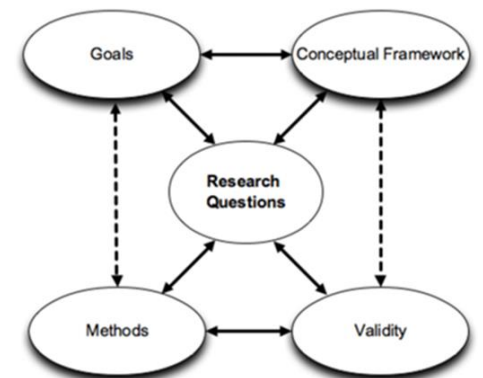
# Concept Map

There are different kinds of concept maps such as:

- An abstract framework mapping the relationship among concepts,
- A flowchart-like account of events,
- A causal network of variables,
- A treelike diagram of concepts,
- A Venn diagram.

# Research Questions

- What specifically do you want to better understand the settings or participants that you are studying?
- What don't you know about the settings or participants that you want to learn?
- What questions should best capture the learnings and understandings about the settings or participants?
- How are the questions related to one another?

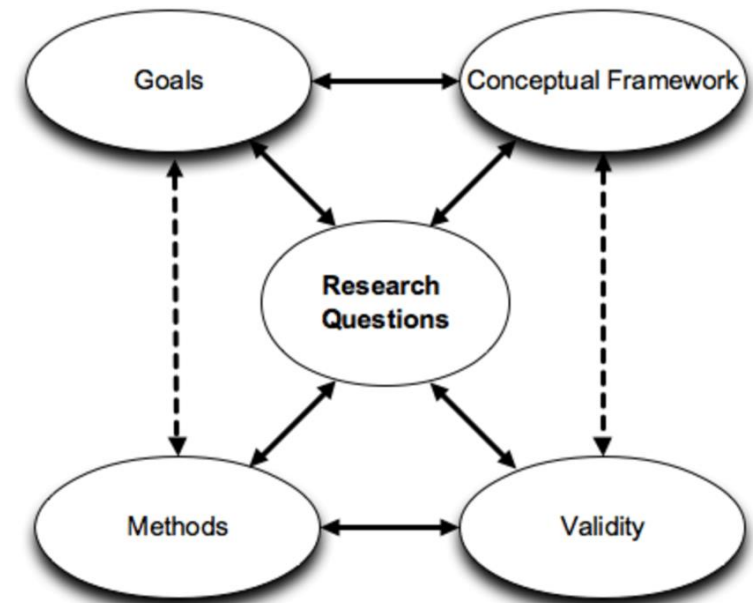


# Research Questions

- The function of research questions is to explain specifically what your study is intended to learn or understand.
- Research questions are derived from your purpose, mediated by your conceptual framework.
- Research questions need to be :-
  - Clear, intelligible, and unambiguous,
  - Focused, but not too narrow,
  - Capable of being researched through data collection,
  - Feasible, given the resources available.

# Methods

- What will the researcher actually do in conducting the research?
- What approaches and techniques will the researcher use to collect and analyse data?



# Methods

- ***There is no specific method for qualitative studies.***
- Decisions about research methods depend on the issues the researcher is studying, the specific context of the research, and also other components of the research design (Maxwell, 2012).
- In contrast with quantitative research, qualitative research neither use probability nor convenience sampling method.
- Qualitative research applies ***purposeful or purposive sampling*** in selecting participants.
- Through purposive sampling, ***particular settings, persons and activities are deliberately selected to provide information that is particularly relevant to the research questions and goals.***

# Methods

- The goals for purposive sampling are as follows:
  - to achieve *representativeness or typicality of the settings, individuals or activities selected*.
  - to adequately *capture the heterogeneity in the population*, so that the conclusion will adequately represent the entire range of variation.
  - to *deliberately select individuals or cases that are critical for testing the theories* that you have began the study with or that you have developed.
  - to *establish particular comparison to illuminate the reasons for differences* between settings or individuals.
  - to *select groups or participants that the researcher can establish more productive relationships*.

# Methods

- ***Data in a qualitative research can be anything.***
- Qualitative data can come from any source, such as
  - Interview (semi-structured, focused group discussions),
  - Observations (participative, non-participative),
  - Documents
  - Audio and Visuals
  - and there is no such thing as inadmissible evidence in understanding the issues that the researcher is studying (including secondary data).

# Methods

- Designing for data that can be analysed :-
  - The implications of the data to your research questions,
  - What kind of data will be required to answer them.
  - How will you analyse that kind of data.
  - How to build a logic model from the data to the conclusion.
  - What sources of evidence will provide you what you need.

# Methods

- There are three main analytic options:
  - **Memos** - *can perform functions that are not related to data analysis, such as reflection of the research goals, methods, theories, the researcher's prior research experience and also his/ her relationships with participants. It facilitate thinking and stimulating analytic insights.*
  - **Coding and thematic analysis** - *the main task of coding and thematic analysis or also called categorising strategy is coding. The main goal of coding is to break up or fracture the data and rearrange them into categories that facilitate comparison between things in the same category which aids the development of theoretical concepts.*
  - **Narrative analysis or connecting strategies** - *operate differently from coding. Instead of fracturing the initial texts into discrete segments and resorting them into categories, it attempts to understand the data in context using different methods to identify the relationships among the different elements of the text.*

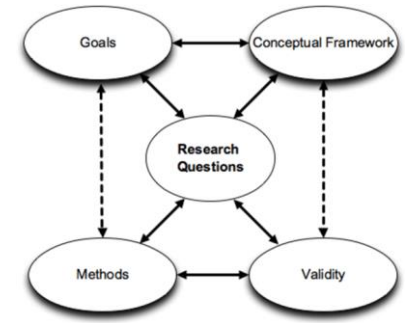
# Methods

- Reliability of codes
  - Coding involves regular review and revision of concepts
  - Coding should be checked for reliability
    - One method is to ask for a second person to code a material
    - Another is to use kappa statistic (Cohen's Kappa) to test for interrater reliability

# Methods

- Collecting information using different methods is common in qualitative research due to the following:
  - Triangulation - involves using different methods as a check on one another, seeing if methods with different strengths and limitations all support a single conclusion.
  - Gain information about different aspects - different methods are used to broaden the range of aspects or phenomena, which Greene (2007) refers to them as complementarity and expansion.

# Validity



- How might the researcher's results and conclusions be wrong?
- What are the plausible alternative interpretations?
- What are the validity threats to the research results and conclusions?
- How do you deal with the validity threats?
- How can the data collected or to be collected could support or challenge your ideas?
- How should other people believe in your results?

# Validity

- Among the strategies that could be applied to test the validity of the are as follows:
  - ***Intensive Long Term Involvement*** - Long-term participant observation provides more complete data about specific situations and events that enables the researcher to check and confirm their observations and inferences.
  - ***Rich Data*** - Long-term involvement and intensive interviews will enable the collection of rich data that are detailed and varied for testing of conclusions.
  - ***Respondent Validation*** - Respondent validation is systematically soliciting feedback about the data and conclusions to avoid misinterpreting the meaning of what participants say and do.

# Validity

- ***Searching for Discrepant Evidence and Negative Cases*** - Researchers need to rigorously examine both the supporting and the discrepant data to assess whether it is more plausible to retain or modify the conclusion.
- ***Triangulation*** - Triangulation refers to the collection of information from a diverse range of individuals and settings, using a variety of methods. The main goal is to reduce the risk of chance associations and of systematic biases due to a specific method, in order to have a better assessment of the generality of the explanations.

# Some Approaches in Qualitative Research

Approach	Aims
Ethnography	Studying the social world of people through immersion in their community
Phenomenology	Understanding the constructs, concepts or ideas people use in everyday life to make sense of their world
Grounded Theory	Developing 'emergent' theories of social action through the identification of analytical categories from data and the relationships from them
Narrative Analysis	Analysing what a narrative reveals about the person and their world

# Recent Approaches

Approach	Epistemology of social reality	Objective
<b><u>Gioia approach</u></b> <b><i>Systematic interpretivism</i></b>	<i>Interpretivism-Constructivism</i> Social reality is interpreted and facts and events are made sense of – collectively constructed and understood	Theory building, theory exploration, theory discovery. Discovering new concepts to explain social reality
<b><u>Yin-Eisenherdt approach</u></b> <b><i>Qualitative positivism</i></b>	<i>Empiricism/Falsificationism-Positivism</i> Social reality exists ‘out there’ waiting to be found, describes, explained, predicted and understood.	Theory testing/falsifying, theory refinement, theory replication, and elimination of alternative explanations
<b><u>Langley approach</u></b> <b><i>Pluralistic realism</i></b>	<i>Critical realism</i> Social reality exists independently of human observers; comprise of (i) ‘real world’ that create social reality; (ii) ‘actual world’ that occurred, whether observed or not; and (iii) ‘empirical world’ that we can experience and measure	Develop theory inductively and deductively to reconstruct, re-describe, and re-contextualise social reality.



**Thank you**

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