

Introducing research paradigms

Global Health & Social Science Website



Learning objectives

- To give meaning to the terms paradigm, epistemology, deductive and inductive processes
- To identify the main characteristics of a positivist/experimental and a naturalistic/anthropological research paradigm

Qualitative research in global health

- In the past three decades qualitative research approaches have gained increasing attention in the global health research
- ‘true understanding in medicine cannot be achieved without adding qualitative methods to the research arsenal’ (Hofman 1993:2 in Baum 1995: 460)

Defining qualitative research

- “The goal of qualitative research is the development of concepts which help to understand social phenomena in natural (rather than experimental) settings, giving due emphasis to the meanings, experiences, and views of all the participants” (Pope & Mays, 1995: 44)
- ‘The aim of such research is to investigate the meaning of social phenomena as experienced by the people themselves’ (Malterud, 2001:398)

Qualitative research

- Bryman's (1998) characteristics of qualitative research:
 - 'Seeing through the eyes'
 - 'Describing the mundane detail of everyday settings'
 - Understanding actions and meanings in their social context

Why do we need to understand basic theory in Qualitative Research?

- TO ENABLE GOOD RESEARCH! - shapes:
- The type of information we need
- Who we need the information from
- The methods we use and where/how we use them
- How we analyse our findings
- How we assess and justify whether our research is good/valid

Paradigm

- A world view, a general perspective
- A way of breaking down the complexity of the real world
- Express what is important, what is legitimate and what is reasonable (adapted from TS Kuhn (1970) *The Structure of Scientific Revolutions*: University of Chicago Press)



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Paradigms

- Paradigms are underlying theoretical ways of viewing and knowing the world that are important in defining the methodology that researchers will apply. Traditionally, two dominant and contrasting paradigms have been apparent.
- The positivist or experimental paradigm is associated with scientific method and research and therefore, quantitative methods. The naturalistic paradigm is often associated with social anthropology and some fields of sociology and is aligned with the use of qualitative methods (Qualitative research glossary, 2003)

Epistemology

- Epistemology is:
- ‘The study of what constitutes knowledge. It is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate’ (Maynard, 1994:10, in Madge et al., 1997, p. 86 in Qualitative Research Glossary, 2003)



Deductive reasoning

- Associated with a naturalistic/qualitative approach
- It 'involves a process in which general rules evolve or develop from individual cases or observation of phenomena' (DePoy & Gitlin, 1994:7)
- The researcher seeks to uncover a truth based on the perceptions of the researched
- See Patton – focus on holistic analysis - as a whole
Shapiro (1973)

Characteristics of theory	Positivist	Naturalistic
History – what is the approach modelled on?	Laboratory based work Classical science	Studies in which the cultural context and subjective understanding of people is important Ethnographic studies, anthropology, sociology
Theory of knowledge/ epistemology – What does the approach assume about reality? What constitutes valid knowledge?	One reality - the aim is to try and standardise the field of study to make sense of it and to get the answer to specific questions <i>TB is caused by TB bacilli; people either know or don't know the cause of TB</i> Knowledge is based on controlled laboratory (or field) experiments which are replicable and have measurable outcomes	There are multiple realities – different people have different perceptions and experiences <i>Meaning of TB is constructed in many different ways, poor, rich, male, female, age, high prevalence of HIV</i> Similar findings should come out of the analysis; but people change and might not have the same ideas later
What is the data based on?	Measurable outcomes (numbers) <i>No of people who know what causes TB; Height, weight, death; No. of people complaining of cough; no. of sputum smear requested; no. of diagnosed TB patients who comply with treatment</i>	Descriptive, explanatory and contextual text (words) <i>Perceptions of TB – what causes it; stigma; barriers to accessing and adhering to treatment;</i>

Characteristics of theory	Positivist	Naturalistic
Process of reasoning	<p><i>Deductive process</i> –logical concepts deduced from laws/theories are confirmed or falsified</p> <p>Hypothesis testing</p> <p><i>e.g. TB Compliance – develop an educational strategy to increase knowledge about TB and conduct an intervention to test the hypothesis that the educational strategy improves compliance rate</i></p> <p><i>Inductive process</i>– Controlled repeated experiments lead logically to general rules</p> <p><i>e.g. TB compliance – observation of proportion of people who comply and multi-variant analysis of factors associated with non-compliance (i.e. lack of biomedical knowledge)</i></p>	<p>Inductive process</p> <p>Knowledge emerges from the process of discovery</p> <p>e.g. the process of qualitative analysis will reveal themes in the data; these themes can form the basis of theory</p> <p><i>The terminologies used to describe TB ‘weak lungs – Nichter - or symptoms indicative of TB and the meanings behind them; difference between men. Women. Older, younger, different ethnic groups; implications for health promotion</i></p>
Purpose	<p><i>Predict</i></p> <p><i>Explain</i></p> <p><i>Test hypotheses</i></p>	<p>Discovering meanings and beliefs,</p> <p>To understand the actions of others</p> <p>To generate theory</p>
Values inherent in the inquiry/role of researcher	<p><i>Excluded: The trial is designed to minimise bias so that individual personal beliefs cannot influence the data, researcher tries to control environment and interaction</i></p> <p><i>e.g. structured questionnaires, lab tests, register audits</i></p>	<p>Included: All research is dictated and influenced by our values – trustworthy research reflects upon these values, and how they influence interactions</p> <p><i>What effect do I have on the research; i.e. known to the community, gender, age, TB status?</i></p>

In conclusion

‘Qualitative approaches are often seem to represent a distinct paradigm, drawing on text instead of numbers, applying procedures for interpretation of meaning instead of statistics to calculate probabilities, aiming for wholeness rather than details, and acknowledging the involvement of the researcher in the construction of knowledge

Malterud, 2001: 399

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