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## A 'Ontology' and 'Epistemology' in Qualitative research

Ranjana Agarwal

Lord Krishna College of Engineering,  
Ghaziabad

### ABSTRACT:

The emerging paradigm in management research is application of qualitative research methods such as ethnography, detailed interviews etc. Though these methods have been legitimately used in other fields of social sciences such as anthropology, sociology etc., management researchers have just started adopting them and applying them in their research. This paper systematically looks into the broad differences between qualitative and quantitative research and then discuss the ontological and epistemological issues of qualitative research.

### INTRODUCTION:

Oxford dictionary defines research as, "The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions" or "to Investigate systematically". In the context of management research, it is referred to as investigation into the managerial problems having direct or indirect impact on economic factors such as industrial productivity, micro and macro economy. Though the management research includes all managerial functions such as marketing, human resource management, operations research, corporate strategy, rural management, public policy and others, this article is written from the perspective of marketing research, particularly consumer behaviour which is my area of research. However, there are some novel methods of research such as neuro-research, geno-research etc., academic research can be broadly classified into qualitative research and quantitative research. Quantitative research is defined as systematic empirical investigation of social phenomena via statistical, mathematical or numerical data or computational techniques (Given, 2008). It involves using a larger and representative sample of population and involves data which can be measured through statistical methods. Qualitative research is a method of inquiry employed in many different academic disciplines, traditionally in the social sciences, but also in market research and further context (Denzin & Lincoln, 2005). Qualitative research, though an established research methodology in social science research such as sociology and anthropology is also gaining ground in management research primarily to understand human behaviour which has great deal of applications in consumer research, employee management and all other area of research majorly dealing with human behaviour. Research is basically aimed towards exploring meaningful understandings from observations. Qualitative researchers are after meaning. The social meaning people attribute to their experiences, circumstances, and situations, as well as the meanings people embed in to texts and other objects, are the focus of qualitative research. Therefore, at the heart of their work, qualitative researchers try to extract meaning from their data. The focus of research is generally words and texts as opposed to numbers (as is the case in quantitative/statistical research) (Alasuutari, 1998). Qualitative research is often described as a naturalistic, interpretative approach, concerned with exploring phenomena 'from the interior' (Flick, 2009). Belk et.al. (2012) mentions that all research is interpretive, whether that involves interpreting patterns in relationships between quantified observations or in recurring patterns in talk, text, images, or action, hence it is important to briefly discuss the difference between qualitative and quantitative research. Data collection methodology most commonly applied in qualitative research is interview. The researcher depends on his/her interaction with the subjects to gather data for their research. The transcripts generated from interviews are

textual data but as the digital imaging technology is evolving and cost of capturing images and videos decreases, the textual data is supplemented by the visual data also gathered from the 'field' by the researcher. The quantitative researcher on the other hand mostly depends on the structured questionnaire to collect the data for his/her research and then uses the statistical techniques like factor analysis, regression, ANOVA etc. to interpret the survey/questionnaire data.

The qualitative research, though gives us a nuanced understanding of the process being studied, the results remain specific to the particular 'setting' studied by the researcher for example the consumption pattern, studied by a researcher, for a particular community, would remain specific to that particular community and would fail to explain the patterns in the nearby communities with the similar level of accuracy while the quantitative research, as it involves large sample, can explain relationships for a larger sample of population.

Parameter	Qualitative	Quantitative
<b>Data Characteristics</b>	Data is in the form of text or visual images or movies which has to be interpreted and analysed	Responses gathered are distilled into numerals which are then subjected to statistical tools
<b>Generalizability</b>	Results are generally assumed to be specific to time, place, people, & culture studied	Results are generally assumed to be generalizable across contexts & cultures
<b>Interpretability of results</b>	Interpretative : The results would depend on the interpretation and understanding of individual researcher	Definite :Data gathered would generate similar results, irrespective of the researcher analysing the data
<b>Environment/ Research Settings</b>	Ideally naturalistic with multiple factors shaping the behaviours observed and discussed	Ideally settings are controlled & variables are manipulated or measured to allow simple causal inferences
<b>Research Instrument</b>	Researcher himself/herself is the key data collection instrument	The researcher is invisible and depend on a structured instrument like questionnaire
<b>Judgement</b>	Subjective: It is subjective by definition and design.	Objective: It manages subjectivity & interprets subjective data to make plausible results

### QUALITATIVE VERSUS QUANTITATIVE RESEARCH DIFFERENCES:

In qualitative research, the researchers or their agents (trained by the researchers) collect the data themselves, i.e. they on their own visit the 'field' and interact with the subject in the subject's natural settings for e.g. The researcher would visit a particular community if he/she intends to study their consumption habits through qualitative methods while in quantitative methods the researcher may not, at all, visit the 'field', they would just develop a questionnaire which can be filled through mediums like online questionnaire survey tools, emails, post etc. and the data gathered can then be analysed by researcher which many times may not be able to give a holistic understanding of research settings to the researcher, for e.g. an American professor from a top North American university conducting research on the 'bottom of the pyramid' producers in a village of Bijnore district in U.P. INDIA, would be tempted to design a questionnaire at his/her place and then get that filled from the poor artisans of Bijnore through some research agency. The researcher though would be able to analyse the data statistically with scientific significance but the inferences derived would be like "a blind person describing the trunk of elephant" as the researcher would be ignorant of the actual environment in which these artisans work, their community, the society, dynamics of caste and religion etc. on the other hand if it would have been a qualitative research, the researcher would had himself/herself made it a point to visit the 'field' for collecting the data through interaction with the artisans which would have also enhances

their understanding of the environment or the settings of the research in addition to gathering the data from the artisans. This would have enhanced the analysing capabilities of the researcher as he researcher would have understanding of the environment in which they work, their constraints like the government would have claimed to provide subsidised electricity but the power supply may only be available for few hours and the diesel run generator would be extremely costly which would make them uncompetitive compared to artisans of other clusters say Chanderi in Madhya Pradesh where the supply of electricity is available for most part of the day. This enhances understanding would be missing from the questionnaire survey data as the researcher would not have thought to put a question on availability of power etc.

In qualitative research, the findings derived from the data gathered during the 'field visits' may differ from researcher to researcher. Each researcher may have their own bias in interpretation of the data and the findings of same data would rarely be same for two different researchers. The interpretation of the data depends upon the subjective biases of the researcher as the researcher themselves are human beings and each individual has unique experiences in his/her life while in quantitative research the results are replicable and would generate similar results when analysed by any researcher.

The above discussion throws light on the difference in the nature of qualitative and quantitative research. However it is difficult to justify that one is better than other, I personally believe that both of these kind of research are equally capable of enhancing our understanding of the underlying process and helping us in our journey of discovery of 'truth'. The applications of qualitative research in marketing began during 1930s when Lazarsfeld (Lazarsfeld 1934) outlined his meticulous approach to collecting and interpreting consumer data, drawing heavily on the psychological insights of Freud and others, in papers published in the Harvard Business Review and elsewhere (Belk et.al.,2012). In the marketing context, qualitative research has begun to gain acceptability and we can see increase in papers in main stream marketing journals such as Journal of Marketing, the Journal of Consumer Research, the Journal of the Academy of Marketing Science, and the Journal of Retailing. Arnould and Thompson (2005, 2007) have started the tradition of qualitative research in marketing under the name of "Consumer Culture Theory" (CCT). The promoters of CCT proactively organize workshops across the world to train young scholars in this area which has led to trained 'qualitative' scholars in the broad of marketing and consumer research.

### **WHY AND WHAT OF QUALITATIVE RESEARCH:**

The logical question, one may ask is, why should we do or study qualitative research? The logical answer is: "to create knowledge". Knowledge is created in social interaction between investigator and respondents and the "results" or "findings" are literally created as the investigation proceeds (Denzin & Lincoln 1994). Qualitative research is difficult to define clearly. It has no theory or paradigm that is distinctively its own ... Nor does qualitative research have a distinct set of methods or practices that are entirely its own. (Denzin and Lincoln,2011).

In order to understand and discuss the different approaches adopted by qualitative researchers, it is helpful to have some understanding of the philosophical debates underpinning the development of qualitative research in general. Some of these relate to 'ontology' – what is the nature of the social world and what is there to know about it?. Ontology is a philosophical belief system about the nature of social reality—what can be known and how. Ontology is concerned with the nature of reality and what there is to know about the world. Key ontological questions concern whether or not there is a social reality that exists independently of human conceptions and interpretations and, closely related to this, whether there is a shared social reality or only multiple, context-specific ones. (Ritchie et.al., 2014). For e.g., in the context of marketing, we can ask, is there something called 'Consumer Research'. Epistemology is concerned with ways of knowing and learning about the world and focuses on issues such as how we can learn about reality and what forms the basis of our knowledge (Ritchie et.al, 2014). This deals with learning the 'How' and 'What' part in exploring the truth. I.e. if we know that there is knowledge or a phenomenon than 'What' is it and 'How' do we discover or reveal it. For e.g., in the context of marketing, if we now know that there is something called 'Consumer Research' then what is 'consumer research' and How do we explore it?. These relates to the epistemological

questioning on 'Consumer Research'. Two main philosophies that have influenced the development of social research are positivism and interpretivism. Positivism holds that methods of the natural sciences are appropriate for social enquiry because human behaviour is governed by law-like regularities; and that it is possible to carry out independent, objective and value free social research while interpretivism, claims that natural science methods are not appropriate for social investigation because the social world is not governed by regularities that hold law-like properties. The philosophy of qualitative research is based on the principle of interpretivism (Ritchie et.al., 2014). There is also epistemological debate about the relative merits and roles of induction and deduction. Induction looks for patterns and associations derived from observations of the world while deduction generates propositions and hypotheses theoretically through a logically derived process.

Inductive approach and deductive approach are also defined as two main approaches to deal with a research problem. The deductive approach intends to test the theory which already exists for some phenomenon while the inductive approach is aimed towards generation of theory emerging from certain data. (Gabriel, 2013) While the inductive approach uses the data to generate ideas the deductive method starts with an idea or theoretical framework and uses the data to verify or disprove the idea (Holloway, 1997). Deductive reasoning works from describing the more general phenomenon to explain the more specific process through the data available for a particular process. The inductive reasoning works the other way, moving from explaining specific observations to broader generalizations and theories.

The purposes for using an inductive approach are to (a) condense raw textual data into a brief, summary format; (b) establish clear links between the evaluation or research objectives and the summary findings derived from the raw data; and (c) develop a framework of the underlying structure of experiences or processes that are evident in the raw data. (Thomas, 2006). Although qualitative research is often viewed as a predominantly inductive paradigm, both deduction and induction are involved at different stages of the qualitative research process (Ritchie et.al., 2014).

The methods generally used in qualitative research are focus groups, ethnography which refers to understanding the social world of people being studied through immersion in their community to produce detailed descriptions of their culture and beliefs. In the marketing qualitative research, the methods used are interviews, projective methods, such as word association, sentence completion, and picture drawing, observational study, online ethnography, a.k.a. netnography etc.

## **CONCLUSION:**

The paper discusses some of the ontological and epistemological issues of qualitative research in the broad field of management and marketing. It also throws some light on the difference between the quantitative and qualitative methods of research in management. Both of the research methods have their unique benefits and both of these methods act as compliment to each other. Qualitative research has started gaining acceptance in the management area with some top journals having started accepting papers based on qualitative research. Qualitative research is bound to make its mark in the management literature in the coming years.

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