

Methodological Issues in Management Research

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Methodological Issues in Management Research: Advances, Challenges, and the Way Ahead

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Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2020

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-78973-974-9 (Print)

ISBN: 978-1-78973-973-2 (Online)

ISBN: 978-1-78973-975-6 (Epub)



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Dedicated to

Two lovely daughters,

SRUTI
&
SHREYA

(daughters of
Madhumati & Rabi
and
Sumita & Susruta,
respectively)

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Foreword

Prof. Rajendra Nargundkar

I have had the pleasure of knowing the editors for a decade now, and their enthusiasm toward Research Methods training has been remarkable. I have also been a small contributor at one of the workshops organized by the Kalinga Institute of Industrial Technology (KIIT) School of Management, KIIT-Bhubaneswar, for faculty members.

In a way, this enthusiasm toward research methods is also a hallmark of what a doctoral student or a research-oriented faculty member needs. These are the two major segments that this book will serve the most, I believe.

Many research students are confused, and rightly so, because the most difficult part of research is not the data collection or analysis, but what precedes these – the formulation of a problem, or the conception and operationalization of constructs, variables, relationships, and so on, in a form that is testable.

Our educational system under-emphasizes formulation and thinking about potential hypotheses. Both quantitative and qualitative methods are little – understood for their optimal and adequate use in research – more so, the qualitative methods, after the proliferation of software that addressed quantitative research analysis.

I am glad that the authors have taken up these issues, as a challenge and elaborated on each one of these in a chapter or more. Particularly, the grounded theory approach and mixed methods research has not been covered adequately as options in doing research, and these are fast gaining currency in our changing world.

The purpose of research is also an important topic. In academic research, the purpose may be quite different from that in commercial research (e.g., marketing research). Covering this in detail is, I think, a very good idea.

Similarly, literature review remains one of the least-understood areas in academic research for a novice. Many Ph.D. students struggle to do a literature review. The many facets of why it should be a major component of doctoral research or in general, publishable research, needs elaborate coverage, and I am happy to see a chapter dedicated to the topic.

Hypothesis formulation is another topic that needs different treatment when doing academic research. A testable hypothesis is the heart of empirical research, but formulating it and testing it later, is an art that is hard to learn, and even harder to teach. This is where literature already published comes in, by helping

identify gaps in work already done, and helping the reader (better) understand what hypotheses are testable, by using appropriate methods.

Appropriate methods are of course, the crux to solving any research problem, assuming it is formulated correctly. Whether they are qualitative, quantitative, or a mix of the two, they determine the credibility of your research findings.

Given the variety of topics, it is understandable that various people have contributed to the making of this book. I think it is timely that a contextual book is being published. It is my feeling that many doctoral students and faculty members will be thankful to the editors, and all other contributors, of this wonderful book for making this effort.

I wish the publishers and all the authors all success.

.....
Dr Rajendra Nargundkar, who did his Ph.D. in Management from Clemson University, USA, in 1989, is a well-known author in the field of Marketing Research, with some best-selling books, to his credit. He has served many leading b-schools like IIM Lucknow, IIM Indore, XIM Bhubaneswar, IIM Kozhikode, Lander University, SC, USA, and Clemson University, SC, USA.

Acknowledgments

Research Methodology (RM), as a paper, has been our passion, not the core subjects, where we are first known for. RM is the paper, where you mostly interact with very senior people, for their doctoral level course work and subsequent research stages, thereby getting a chance to learn new things, new insights with every single research scholar, with every research topic, which has to be unique, as desired. The passion and challenges often required consulting and taking help from fellow experts in this interesting field of RM, informally and also formally, in the form of “Workshops on Research Methodology,” conducted by us, every year, at our institute. During such interactions and deliberations among scholars and invited experts, there was a common feeling and agreement, on the necessity of having a compilation, like the present book, keeping in view the specific need of Indian scholars in the field of Management. This paved the way for this RM-Book project.

We thank all our fellow colleagues, from the field of RM, and our beloved doctoral scholars, for inspiring us to go for such a book. We both fondly remember many students of our RM-paper, who could successfully convert their mini-projects (of RM-paper) to publish as research articles in reputed journals.

We are highly indebted and thankful to all our chapter contributors, for preparing contents for specific chapters allotted to them, and completing it within stipulated time. They are the main architect of this book.

We are thankful to all the anonymous reviewers of this book (proposal), who were unanimous in accepting the importance and strength of this work.

We are very much thankful to the entire editorial and publication team members of Emerald Publications, and particularly the constant support of Ms. Sophie Darling is really unforgettable.

We, both the editors, are indebted to our respective family members, for their constant support and encouragements, which are the main ingredients for successful completion.

Lastly, despite our best possible efforts, there might be some deficiency or inadvertent errors in this edited book. We shall appreciate and welcome suggestions and feedback, on possible improvement of this book. We sincerely hope to come out with updated and extended version this book, and shall try to incorporate such suggestion.

R. N. Subudhi & Sumita Mishra, Editors

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Chapter 1

The Methodological Domain in Management Research

Sumita Mishra and Rabi N. Subudhi

Abstract

The introductory paper begins with the issue about the relevance of research in management. It emphasizes the need for scholars to adopt methodologies best suited to the research problem of their choice. This paper contains sections on the nature of management research, dominant research paradigms, the methodological domain, quantitative versus qualitative research, and triangulation in using multiple methodologies. The paper provides a background to the purpose of the book and summarizes in brief the purpose of each the subsequent papers.

Keywords: Management research; research paradigms; methodological domain; quantitative versus qualitative research; triangulation; multiple methodologies

Introduction

What makes management research interesting? What is it about scholarly research that grabs the attention of a potential audience? How can research in management induce relevance and yet be rigorous? These and many more questions were raised and attempted answers to in a thought-provoking paper by [Bartunek, Rynes, and Ireland \(2006\)](#) published in *Academy of Management Journal*. At the onset [Bartunek et al. \(2006\)](#) maintain that though research in management requires to generate interest in a targeted audience; the importance of a research question and the validity of conclusions drawn from the foundations of high quality and relevant research. The relevance of academic research has been an issue of long standing among academicians ([Brannick & Coghlan, 2006](#); [Panda & Gupta, 2014](#); [Van de Ven, 2007](#)). In a more recent paper, [Panda and Gupta \(2014\)](#) debating on the relevance of academic research in management in the Indian scenario

mention the limited applicability of management research to management practice. Among the many reasons cited by them for this unfortunate state of research, a pertinent reason mentioned from an earlier study by Shapiro, Kirkman, and Courtney (2007) is the “lost in translation gap” and the “lost before translation gap.” The “lost in translation gap” refers to the failure of managerially relevant research reaching a target audience while “the lost before translation gap” points out to the failure of management researchers in undertaking relevant research problems in management practice (Panda & Gupta, 2014).

To promote academic research with relevance Panda and Gupta (2014) take up the cause for methodologies. Academic socialization of scholars (inclusive of doctoral scholars) is predilected toward great rigor in data analysis using appropriate software and techniques. But an insularity in such analysis without proper address to knowledge bases existing on a problem tends to produce elegant, scientific models though losing relevance for practice in management research. Thus, Panda and Gupta (2014) aptly urge scholars to leverage methodologies suitable for research problems while helping scholars address the interdependence between theory and practice. The impact of management studies depends upon the appropriateness and rigor of the methods chosen (Scandura & Williams, 2000). While scholars do address the rigor of methods, the appropriateness of their selection is a concern as methodological choices are often subjected to research proclivities of scholars. Rudolph and Peluchette (1992) emphatically stated that academic scholars needed to curb their leanings toward quantitative methods for doing research. Finally, a focus on indigenous theories of management relevant to local contexts can go a long way in injecting relevance in research.

The present book represents an attempt of the editors to address issues interspersed in the preceding paragraphs. The methodological landscape in management research is an ever-changing domain with differing paradigms, methods, data collection tools, and analytical techniques. As doctoral scholars embark on an interesting yet challenging journey of research, their concerns with research problems and a suitable methodological framework for doing research assume paramount importance. The book presents a constellation of papers from Indian scholars located across the country with an overriding aim of addressing key methodological issues beginning with a basic understanding to the purpose and process of research. The editors hope that the papers with their varied foci will provide a suitable platform to scholars in understanding, appreciating, and finally selecting appropriate methods for study.

The Nature of Management Research

Throughout history, researchers have attempted to explore and explain reality. The foundations on which researchers work with their reality are their *ontological* and *epistemological* positions. These positions are critical to one’s own research as they shape the conceptualization of research problems, the framing of research questions, the choice of research methodologies, and the final interpretations of results. These positions are an outgrowth of the deeply entrenched beliefs of a researcher about the world. Ontological positions are concerned with what constitutes reality and researchers accordingly need to take positions on self-perceptions

of how things are and how they really work (Gupta & Awasthy, 2015). Epistemology represents the theory of knowledge (Arbnor & Bjerke, 2008). This position reflects the researcher's position on views of what can be known and how can it be known (Gupta & Awasthy, 2015). Since reality can be understood through several perspectives in social sciences, researchers often take differing ontological and epistemological positions.

Discussions proliferating on the nature of management research focused on its fragmented and varied ontological status (Tranfield, Denyer, & Smart, 2003). Whitley (1984) in an early influential paper published in the *Journal of Management Studies* described management as a practically oriented social science. In a lucid description on the body of knowledge called as management, Whitley (1984) stated that the preferred way for formulating and solving problems were subject to disputes and often assessed through different standards. Refining Whitley's (1984) views, later prominent researchers like Pettigrew (1997) emphasized the divide between stakeholder groups in management research and the need for studies to address policy and practice.

The inherent diversity prevalent in the discipline, the diffusion of standards in assessing the formulation, and relevance of problems have paved the path for heterogeneity in ontological and epistemological positions of various stakeholders. These divergences juxtaposed with the practical orientation of management as a discipline have increased the distance between theory and practice (Anderson, Herriot, & Hodgkinson, 2001). To bridge these differences, researchers (i.e., Panda & Gupta, 2014; Tranfield et al., 2003) over a decade and half stressed on the need for studies to deliver the twin demand of high academic quality and yet maintaining sensitivity to practitioners and context-specific perspectives. The pivotal body dedicated to the study and critique of management research – Academy of Management and its various country-specific papers have continually created forums to explore research both theoretically sound, methodologically rigorous, and yet relevant to the practitioner community (Tranfield & Starkey, 1998; Tranfield et al., 2003).

Dominant Research Paradigms

Brannick and Coghlan (2007) stated that management research represented a hotbed of theories that struggled for supremacy to impose meanings on shared versions of organizational life. These theories were also the product of varied research paradigms. Thomas Kuhn's epic book titled, *The Structure of Scientific Revolutions*, originally published in 1962 popularized the concept of paradigms which summarized the belief of researchers about their efforts of creating knowledge (Morgan, 2007). Though definitions of paradigms abound in available literature, a comprehensive understanding was provided by Morgan (2007). He provided four alternative applications of the "paradigm concept" in social sciences namely (1) paradigms as worldviews or ways of experiencing and thinking about the world, (2) paradigms as epistemological stances – a narrower stance that contains worldviews in the domain of knowledge and influences how research questions are asked and answered, (3) paradigms as shared beliefs among members of a certain area and finally, and (4) paradigms as models of research-that

serves as exemplars of research conducted within a domain. In the early part of the twenty-first century the extant research methods and methodology-related literature provided cognizance to three major research paradigms in social sciences: (1) Positivism, (2) Hermeneutics, and (3) Action research (Brannick & Coghlan, 2007).

- (1) *Positivist tradition*: The positivist tradition views research as an objective process, the researcher as detached charged with the purpose of describing, explaining, and testing social phenomena. Theory in the positivist tradition comprises of three major elements: (1) concepts (terms that represent features of complex phenomena such as job satisfaction, employment, etc.), (2) propositions or statements linking these concepts, and (3) measurement tools/techniques (Brannick & Coghlan, 2007). Concepts lie at the heart of research and the approach is concerned with reliability, validity, and accurate measures prior to contribution of theory to extant or new knowledge. Though theories are important, the positivist tradition accords more importance to the process of testing theories (Brannick & Coghlan, 2007). This tradition while laying the foundations of quantitative methods for research and inquiry dominated management research for years where academic institutes in courses on “Social Research Methods” primarily focused on statistical techniques of measurement such correlations, regressions, and the structural equation modeling (Panda & Gupta, 2014).
- (2) *Hermeneutic tradition*: The hermeneutic tradition with an emphasis on interpreting shared meanings and experiences of members of a community is largely subjective in its construction of reality. The researcher is an engaged participant, as opposed to that of the positivist tradition and his/her prolonged engagement with participants is at the heart of creating good quality research. The researcher enters the field without any a priori assumptions or hypotheses about reality. Though a complete eradication of one’s world views, beliefs, and assumptions are difficult, the hermeneutic tradition discourages researchers from premature theorizing and urges them to build relevant theories from empirical experience (Brannick & Coghlan, 2007). Researchers generally “go native” and are liaisons between the community they interpret and the audience they report to. The tradition has laid down the foundations of qualitative research methods in management research calling for engaging participants and providing endogenous analysis of a problem or phenomena under study. The analysis from such methods follows the “thick description” as popularized by the ethnographic accounts of Geertz (1973). The classic Hawthorne experiments (Roethlisberger & Dickson, 1939) that provided the backbone of organizational behavior as a formal discipline are a prime example of research following the hermeneutic tradition.
- (3) *Action research tradition*: The balance between methodological rigor and relevance of research for practitioners was best addressed by the action research tradition. As succinctly described by Brannick and Coghlan (2007) action research aims at research in action vis-à-vis research about action. Given this atypical nature of the action research tradition, the lines between theory and

practice are blurred. Theory development in action research follows a two-step cyclical process (Coghlan & Brannick, 2005). The first stage represents planning, implementing, and evaluating the action while the second is a meta-cycle reflecting upon the action research cycle in the first stage. This tradition provides a foundation to insider-based research yielding richer accounts of organizational dynamics (Brannick & Coghlan, 2007). Interesting accounts on change management such as participative change (Whyte, 1991) and information technology-enabled change (Coghlan & McDonagh, 2001) provide excellent examples of action research.

The Methodological Domain

The rich, diverse, and applied nature of research leading to strong research paradigmatic traditions have provided a sound methodological base for research and researchers. The etymological and traceable meaning of methodology (deduced from the Greek word *methodos* or the way along which) indicates a route the researcher will require to achieve certain results (i.e., knowledge, insights, and solutions to problems) (Jonker & Pennink, 2010). Methodology also performs another important function for a researcher. It helps the researcher provide scientific justifications for approaches to problems and solutions drawn to supervisors, the client, or people in an organization. Hence the researcher is charged with describing transparently the methodological choices made in relationship with the problem at hand, the results derived, and their implication to theory and practice. Thus, methodology does not only imply the conducting of research; it also generates an awareness in the researcher of the paths chosen or the routes selected with deliberate intent for solving problems as identified within the scope of a study. The methodological domain also expects answers to deep rooted questions within a researcher, that is, How do you view the question central to a research? What do you think when you view it? What are your thoughts about appropriate methodologies to provide answers to questions raised? What in your mind can be the best outcome of the research conducted? (Jonker & Pennink, 2010). Methodological domains of researchers while displaying measurement techniques at a very micro level also represent paradigmatic choices, ontological, and epistemological positions at a macro level.

Quantitative and Qualitative Research Methods

The heterogeneity apparent in management research owing to differing conceptualizations of problems, differences in ontological and epistemological stances of researchers, research paradigms have paved the path for a long-standing dichotomy in research methods in social sciences (inclusive of management), that is, quantitative and qualitative research methods. Quantitative studies are often based on a positivist paradigm while the qualitative studies largely favor the hermeneutic traditions (Firestone, 1987). The difference in research paradigms occur as these methods are susceptible to differing rhetoric (House, 1979). The major bases of differences between the two methodological domains have been lucidly

summarized by Firestone (1987). Quantitative and qualitative methods differ on four major grounds, that is, (1) assumptions about the world, (2) purpose, (3) approach, and finally (4) role of the researcher (Firestone, 1987). A brief exposition of these bases of difference herein is worthwhile for a better understanding of these major methodological dichotomies.

- *Assumptions about the world:* Quantitative research basing on positivism views the world as an objective reality free from the beliefs of individual actors. Qualitative research, contrarily emerging out of the hermeneutic paradigm takes on the view of reality of socially constructed out of the experiences of actors/individuals involved.
- *Purpose of research:* Quantitative research seeks to explain the causes of changes in social facts through measurement and quantitative analysis of data. Qualitative research relies on understanding (borrowed from the German word – *Verstehen*) of social phenomena from the native point of view. *Verstehen* is the underlying spirit of qualitative research permeating the framing of problems and conducting the research. It refers to participative understanding from the first person and is often a never-ending process taking into count history, culture, and previous endogenous experiences of the actors involved (Weber, 1981).
- *Approach:* The quantitative researcher often employs experimental or correlational research designs to reduce error and bias while the qualitative researcher strives to faithfully recount endogenous accounts following the ethnographic tradition of research.
- *Role of researcher:* Ideally researchers in quantitative analysis requires a detachment from the participants to avoid bias whereas the qualitative research must “go native” and immerse in a social context to produce viable account of research.

Triangulation in Management Research

Bridging the Quantitative Qualitative Divide

Triangulation as described in a seminal publication by Denzin (1978) is the combination of methods to provide valid and rigorous research. The term was borrowed into social science research from the military where it signified the use of multiple location points to locate a target’s exact position (Jonsen & Jehn, 2009). The foremost purpose of triangulation is the desire to reduce biases within a research and increase its reliability and validity while a tertiary purpose is to boost the confidence of the researcher regarding the interpretation of results (Jonsen & Jehn, 2009). Triangulation has assumed different forms while the most talked about is the use of multiple methods in examining a social phenomenon of relevance (Denzin, 1978).

The underlying philosophical and methodological differences between quantitative and qualitative research often provide a perception to academicians that a combination of both methodologies in a single research design is difficult. But in

the backdrop of significant achievements in the methodological landscape of management research, a multimethod scenario has become increasingly common (Bryman, 2006). Pathbreaking developments in multimethod research were found in early works of prominent management researchers such as Van Mannen (1979) and Jick (1979) who were among the first to examine the usefulness of this combination in theory development. A common platform to bridging the gap between quantitative and qualitative is the traditional notion of starting with qualitative methods to build an initial theoretical framework and then using quantitative methods in theory testing (Shah & Corley, 2006). Rarer multimethod designs for research involve qualitative inquiry following quantitative analysis. Such designs are useful in two situations:

- (1) when unexpected patterns emerge in quantitative data analysis; and
- (2) when the mechanisms leading to these unexpected patterns require further exploration (Shah & Corley, 2006).

A combination of quantitative and qualitative research is not nomological but has found sound justification in extant literature by several scholars. Greene, Caracelli, and Graham (1989) provided important justifications for this amalgamation of the methodologies:

- *Triangulations of results*: The emphasis here is on corroboration between quantitative and qualitative data.
- *Complementarity*: The results gleaned by using one method can be enhanced through the other.
- *Development*: Usage of data from one method to develop and provide fillip to the other.
- *Initiation*: The urge to discover new knowledge using multiple methods.
- *Expansion*: The combination of differing methods helps in expanding the length and breadth of inquiry owing to the different philosophies underlying these methodological approaches.

Combination of methodologies indeed helps in producing richer insights into the same research problem. They also urge researchers to investigate unanticipated trends, results, and issues and seek for a solution. Thus, though these methodological domains remain dichotomous owing to differences in the fundamental nature of inquiry, they are not mutually exclusive. There is a definite case for encouraging researchers to elaborate the rationale behind a multimethod approach to research.

Contributions and Organization of the Book

In the backdrop of these introductory sections, the book is positioned to sensitize researchers/doctoral scholars on issues of basic purpose of research, reviewing of relevant literature, research designs, data collection tools for quantitative and qualitative research, and popular methodologies (both quantitative and

qualitative) for analysis of data. The methodological domain is heterogeneous with numerous tools available to conduct research. But given this methodological bounty, scholars need to be aware of “how” and “why” of their methodological choices to justify the conduct of any research. The book is a collection of papers from very experienced academicians around the country (India), on topical issues concerning the research queries of management scholars.

Sumita Mishra's paper, *Reviewing the Literature*, highlights the beginning of research where a scholar seeks justification for conducting the research through analysis of extant literature. *Shikta Singh's* paper provides an exposition into the Purpose and Process of Research. *Fakir M. Sahoo's* paper, *Research Design*, introduces scholars into various research designs such as cross-sectional, sequential, experimental, and correlational with suitable illustrations. *Sudhakar Patra's* paper, *Questionnaire Design*, covers the attributes of a well-designed questionnaire—the all-pervasive method to collect quantitative data. Different types of questionnaires are discussed exhaustively, with tips on structure, procedures, and standard format examples. *Upasana A. Agarwal's* paper, *Qualitative Interviewing*, and *Vijayalakshmi C. Balasubramaniam's* paper, *Focus Group Discussions* help scholars get a holistic idea of two of the most popular tools to glean qualitative data. *Punyaslok Dhall's* paper, *Quantitative Data Analysis*, covers the fundamentals of univariate, bivariate, and multivariate analysis techniques along with statistical significance. The paper reiterates to the importance of selecting appropriate techniques of data analysis relevant to the problem at hand. *Rabi N. Subudhi's* paper, *Testing of Hypothesis: Concepts and Applications*, is aimed at helping scholars learn the concepts of different tests hypothesis, and on how to select samples from populations for sample testing. It covers both small and large sample tests, relating to sample mean or proportion. *Richa Awasthy's* paper, *Nature of Qualitative Research*, arms scholars with an optimal understanding about the nuts and bolts of qualitative research. The papers by *Sunil Sharma and colleagues* and by *Srilata Patnaik and Satyendra C. Pandey* provide descriptions of two major methods for qualitative data analysis, that is, grounded theory and case-based research. *Pratap K. J. Mohapatra's* paper introduces readers to four non-conventional research methods that are not covered in the previous papers. They are (1) different non-parametric statistics, (2) interpretive structural modeling, (3) analytic hierarchy process, and (4) data envelopment analysis.

The final paper is an addition by the editors termed as a *special section* highlighting five cases of research undertaken by faculty scholars in advanced stages of their doctoral journey. This special section, through these brief papers, also aims in providing examples of some typical research projects, at a doctoral level. *Ayushi Raichoudhury's* paper explains an attempt to measure socio-economic development of different states in India through the help of self-designed index. *Malabika Sahoo's* paper presents the rationale behind choices made by scholars to use goodness of fit indices to measure the validity of measurement and structural models. *Manoj K. Jena and Brajaballav Kar's* paper explains the process of reduction of data collected from secondary data sources. *Subhra Pattnaik's* paper is an illustration of working with second order constructs