Research Methodology: Logic, Methods and Cases

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Every researcher knows the significance of research methodology. Therefore, it comes as no surprise that there are abundant books on research methodology. However, the author’s approach of logically justifying every concept and step of research methodology makes this a unique book.

The author has clearly established the importance of knowing ‘why’ rather than ‘how’ of research for achieving depth and quality. Understanding the finer aspects, particularly the scientific part of the research methodology, irrespective of the topic, is the USP of the book. Apart from 16 chapters, the book contains two supplementary appendices and free online resources that include PowerPoint slides for each chapter, critical thinking questions and guidelines to conduct discussions in the classroom. Each chapter starts with an apt quotation and the learning objectives to be achieved. The subject matter is profusely illustrated by many original figures and diagrams. The key figure introduced in Chapter 2 is weaved all through the book for continuity. Each chapter is rounded off by a summary, key terms, concept development questions, critical thinking questions and case studies followed by references to facilitate further reading. Although the book is written in a textbook style, it also serves the research needs fairly well.

The two appendices make for an interesting reading. Appendix 1 on industrial marketing research is of interest to researchers and professionals in the field. Comparison of various statistical computing resources provided in Appendix 2 is useful for the practitioners. The material presented in the book can be divided into three broad divisions with certain overlaps. One division deals with the philosophical aspects of the research methodology (Chapters 1–3 and 5–7), while another deals with the design aspect of the research (Chapters 4, 15 and 16). The third division is on research conduct guidance (Chapters 8–13) and also elaborated on communicating the research results (Chapter 14).
A discussion on the differentiation between research methodology and research methods is the focus of the introductory chapter. The concept of research ethics is outlined along with the logic of designing various types of research proposals. The introduction also gives insight on the practical aspects of research proposal evaluation and its approval.

The next chapter explains science and scientific thinking in detail. It prepares the reader to undertake the research in a systematic scientific framework. This chapter introduces a ‘key figure’ whose variations are deployed in subsequent chapters to link different aspects of research with science. In my opinion, this chapter sets the tone for the whole book as the author aspires to frame research as a scientific activity.

Introducing research process, primarily as a validation process, constitutes the core of Chapter 3. The presentation of three research process models—(a) substance-conceptual-methodological model, (b) the ABCDE model and (c) multistep functional–sequential model—is quite insightful. Numerous diagrams illustrating those models help in capturing the essence of the research process adequately. An exclusive section on research in business management admirably links marketing research with the theory.

Chapter 4 highlights, with examples, how research design plays a pivotal role in attempting to reach dependable conclusions. It also emphasizes that research design is akin to planning research. Once again, the link between philosophy and research design is featured.

Chapter 5 reinforces the role of logic in research thinking. Carrying out any research activity in the form of a scientific inquiry using deductive and inductive arguments is explained effectively. Figures in the chapter prove to be a valuable aid in understanding the related abstract concepts.

Discussions around theories and hypotheses are central to Chapter 6. Besides elaborating the many features of theory, this chapter also deals with ‘sign’ and ‘signata’ interpretation of a theory, which is rarely found in a book on research methodology. The section dealing with hypotheses also brings out the role of ‘sign’ and ‘signata’ in research in general, and relation with the theory in particular, like the falsification of a theory. The crucial role played by a bridge hypothesis in research is also well elaborated.

Chapter 7 draws on the concepts introduced in the earlier chapters to concentrate on explanation, prediction and laws. Various models bringing out the role of explanations in management are refreshing. Equally interesting is the deliberation on the interrelationship between explanations and predictions, a form of scientific laws and their role in marketing and marketing research.

Chapter 8 deals with converting observations into measured data. With this chapter, the author begins to guide the reader on conducting research in real life. Measurement forms the central theme of this chapter. The concept of measurement scales is superbly depicted by a number of figures. It is further associated with data validity and reliability. This chapter is of relevance to those undertaking empirical research.

Although Chapter 9 on statistical sampling is not any different from other books on research methodology, the figures presented can invigorate the reader. The discussion on the connection of deduction and induction to the sampling process reveals important research dimension.

The approach to statistical analysis of the data is explained in Chapter 10. The operations of parametric and non-parametric statistical tests matching the type of data and objective at hand are presented. The frequently asked questions about the choice of a statistical test, that is, Exhibit 10.3 (pp. 390–392), provides leads to commonly faced issues.

Chapter 11 is dedicated to the applications of the statistical methods for testing the hypothesis. The focus is more on the operational aspects such as the types of error that can occur while testing a hypothesis, their implications and strategies to minimize the errors in practice. How decision-making could be supported by such analysis is illustrated by several examples.

An outline of select advanced statistical techniques is presented in Chapter 12. Various situations and these techniques are mapped for relevance and suitability. The techniques are explained by applications in the marketing field. This chapter is of relevance to an experienced researcher.

After making a distinction between the primary and secondary data, Chapter 13 presents at length seven methods for primary data collection, namely,
interviewing, focus group, sampling surveys, observation, experimentation, simulation and projective techniques. Annexure to the chapter elaborates the steps for conducting a focus group interview.

Chapter 14 focuses on communicating research findings. Distinction between a research report and research paper is tabulated to show the variation in the style to be employed for writing them. The finer aspects such as formulating the research argument, defending the methodology and results, and maintaining a flow in writing are discussed in sufficient depth. Some thoughts on oral presentation of research are also dovetailed. The annexure to this chapter elaborates each component of a research report through an example. The power of cross-tabulation as an analytical tool in research deliberated here is thought-provoking.

Designing a questionnaire—a tool most often used for data collection—is comprehensively covered in Chapter 15. Discussion on standardized questionnaire brings out pros and cons of its use in research practice. All major elements of a questionnaire design are thoroughly detailed.

An exclusive chapter (16) on field operations provides valuable tips and practical guidance to the researchers for conducting interview-based surveys and so on. Interestingly, it is stated that despite offering inducements, the rate of refusal to participate or respond in the survey is increasing. However, the study in reference appears to be a foreign one (p. 653), and its application to an Indian context has not been clarified.

There are 47 case studies distributed over different chapters of the book. Each case study raises a few questions for discussion. Most of the cases are drawn from marketing, author’s area of specialization. However, some of them are too brief.

This book will be especially useful for faculty in business management due to its textbook style approach that includes ‘concept review’ and ‘critical thinking’ questions at the end of each chapter. The case studies can generate lively discussions in the classroom and outside.

However, the chapter scheme employed by the author is not very well organized. For instance, Chapter 14 on research reporting should probably have been the last chapter. Chapters 15 and 16 on questionnaire design and field operations respectively should logically appear before the research writing. It sounds rather ironical that the very feature of exhaustive diagrams making this book so distinct can be counterproductive in certain instances. That means too many of those, even for the straightforward ideas, can lead to fatigue for the reader, for example, Figure 8.15 (p. 277) and Figure 9.15 (p. 340).

Despite, these minor drawbacks and non-inclusion of qualitative research methods, the painstakingly produced synthesis of ideas from numerous sources and their illustrations through plentiful original drawings make this book quite instructive in comprehending the fundamentals of research methodology. The author’s excellent command over the language makes reading a pleasure even though it deals with the serious matter.

To summarise, this reasonably priced book deserves serious attention by researchers, practitioners and those engaged in evaluating research funding proposals or examining research-based works.

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