

*Principles of Methodology:
Research Design in Social Science*
by P. 6 & C. Bellamy (2012).
London, UK: Sage. \$49

JMDE
Journal of MultiDisciplinary Evaluation

ISSN 1556-8180
<http://www.jmde.com>

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Distinguishing between the concepts of methods, design, and methodology is a critical skill needed by the practicing evaluator. However, standard research methods texts sometimes lack deep discussion of these issues. Perri 6 and Christine Bellamy seek to fill that gap with their book, "Principles of methodology: Research design in the social sciences. At a mere 324 pages, this book appears to be a lightweight when compared to other books on research methods and designs. However, the book is dense, and replete with a wealth of information and insight into the research design process, and even more importantly, the process of making valid and robust inferences from research data.

The book begins with a discussion about methodology itself, its definitions, primary concerns, and mechanisms of action. Six and Bellmay define methodology as being the "understanding of how to proceed from the findings of empirical research to make inferences about the truth – or at least the adequacy – of theories". This is refreshing, as few of the texts that have been prescribed to me during my time as a doctoral student in evaluation so specifically and clearly define the term. The authors spend the first parts of the book clearly defining and demystifying the myths and misconceptions surrounding methodological study. Additionally, they clearly state what the book is not about, which is well tread and well worn debates about specific methods or design choices. This is also refreshing.

The remainder of the first chapter of the book focuses on the concepts of inferences and warrants. Specifically, the authors work to identify what constitutes an inference, and how to warrant conclusions based on inferences. They also spend a

few pages discussing tradeoffs between validity and reliability. These tradeoffs are not often well understood, which is unfortunate, since Shadish, Cook, and Leviton note that they are the foundation of a better theory of evaluation (Shadish, Cook, & Leviton, *Foundations of Program Evaluation: Theories of Practice*, 1991).

Chapters 2, 3, and 4 deal with several other important issues related to research design and the logic of science; methodology and its role in developing social science knowledge, testing, confirming and falsifying, and perspectives on findings from social research. These topics are all framed within the book's ultimate goal of helping the researcher to make credible inferences from research data.

Of particular interest in this section of the book is the discussion of positivism, constructivism, and post-modernism. The authors make the point that belief in a paradigm should not be a static quality of an individual, but rather should be a property of the research/evaluation question at hand. They present a balanced view of the various research paradigms, by arguing that savvy practitioners of social research must recognize the need for multiple ways of knowing.

Part II of the book deals extensively with research design issues. The chapter headings in this section include: types of research design, variable-oriented research designs, case-based research designs, comparative and case-oriented research designs, and concept formation. The initial discussion of research designs is fairly atypical, in that they avoid the standard typologies and hierarchies of evidence that are ever present in the research world. Instead, they simply discuss experimental and observational research, with

particular attention to the processes and pitfalls of drawing inferences from these types of designs.

The principle method of classifying research designs used in this book are based on the purpose of the research – variable oriented research for identifying patterns of covariation between variables and case-oriented research in support of theories of decision making, causal logic, and general explanatory work. The authors maintain a balanced perspective throughout, not preferring one type of research over any other outside of the context of the purpose of the research, and are willing to present both the advantages and limitations of all the approaches they discuss. They also present a running discussion of the impacts that various research design types have on validity.

In my opinion, Part III of the book is the meat and potatoes of the work for the practicing researcher/methodologist/evaluator. The chapter headings in this section include: why ideas about explanation matter for methodology, basic forms of explanation, mechanisms, contexts, and trajectories, warranting explanations, between-case and within-case strategies, interpretation, and warranting interpretation.

In the chapter on explanation, Six and Bellamy spend less time overall discussing causality than other books might, and more time discussing how to make explanatory inferences in light of explanatory problems. They also discuss the implications of those problems for research design, and the logic, tradeoffs and design implications of the use of various types of explanation.

The chapter on mechanisms, contexts, and trajectories, focuses on the various influences within the research space that impact one's ability to explain the phenomena of interest in the study. As in earlier chapters, the authors tie these concepts to "real life" examples that are drawn from actual research studies. They conclude this chapter with a discussion of the trade offs inherent in identifying different forms of mechanisms, contexts, and trajectories, and their implications for the outcome of the research/evaluation being conducted.

The authors state the objectives of the chapter on warranting inferences as being to discuss necessary and sufficient conditions for causal inference, considering the differences between probabilistic and deterministic explanations, and comparing and contrasting the inferential strategies of induction, abduction, and deduction. This third discussion was fairly complex, and at times required multiple passes to fully appreciate the arguments made.

The chapter about within and between case designs thoroughly discusses the process of making causal inferences using each of these design types, while the chapters on interpretations and warranting interpretations focus on how we make interpretations, kinds of interpretations, and validity in interpretations. The authors investigate whether valid interpretations are even possible at all, and provide some strategies by which the research can make as accurate interpretations as is feasible within the research.

The final section of the book ties the previous sections together well, and includes a discussion of the synthesis of various research strategies and necessary design trade-offs in terms of methodology, inference, and interpretations. They also discuss how making these trade-offs impacts the validity of the inferences drawn from the research. This type of discussion is often lacking in many other texts; Shadish, Cook, and Leviton (1991) note that very few prescriptions of how to make these trade-offs are available.

The major strengths of this book include the fact that it looks deeper into its constituent material than many of the other books that I have read. Additionally, the discussions in the book typically take a form that is accessible to anyone familiar with research and design issues. A caveat to this statement is that by the time I reviewed the book, I was at the end of a doctoral program, so my perception of what is accessible may be different from those who are unfamiliar with these topics. For the novice that has had little exposure to these concepts, however, the book provides enough information on each topic to make them accessible.

Another major strength of the book is that although the authors presented several complex meta-discussions on the philosophy of science, the authors avoid the trap of sounding overly philosophical. This helps the reader to engage the material in a more meaningful way than in some heavier works.

Finally, a third major strength of this work is that it approaches design and methods in a way that provides one with solid rationales for the use of the designs and methods they discuss. This allows the reader to understand that the research process should not become a fill in the blank exercise that is devoid of context, and also helps the researcher to be in the mindset of avoiding the design cookbook approach.

Despite all the strengths of the book, there are a few weaknesses as well, although these do not do enough to offset the advantages. The primary weakness of the book is that the concepts it deals with are often complex and not easily discussed in

such a short book. Although the authors do a lot to combat this, they sometimes make the material quite dense, and the reader may need to re-read some passages to fully understand them deeply. The second weakness is that the authors use some colloquialisms that may be unfamiliar to readers outside the UK. While not terribly problematic, it did create a few situations where I had to think closely about what the authors were discussing. However, this also forced me to pay close attention to the work, which is not necessarily a terrible thing. Finally, there were a few points where the sidebar illustrations distracted from the flow of the book. Again, this is simply a problem of form, and occurs infrequently.

All things considered, I would highly recommend this book, with one caveat. As I read the book, I found myself simultaneously believing that I should have been assigned this book during my early coursework in evaluation and being glad that I wasn't assigned this book at such an early point. In fact, I have come to believe that one should encounter this book at both points. That is, one should be brought to an understanding of these issues before bad habits creep into their research and evaluation work, and then should go back and read it when they have been exposed to enough research and statistical methods courses so that they can fully appreciate it. I find myself looking forward to reading other works by these authors.

References

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