

Foreword

Theory and method have been treated typically as distinct aspects of science in the basic and applied social sciences. This can be seen in three senses. Academic researchers tend to see themselves as either theorists or substantive inquirers on one hand, or as methodologists on the other hand. Coursework is segregated into theory or methods classes. And fields of inquiry promote a favorite method to test their theories with alternative methods given secondary status, if treated at all. All too often, the net result is theories that are tested inadequately or are tested in narrow ways or methods in search of applications to phenomena without proper attention given to the mechanisms behind, and boundary conditions of, the theories and phenomena under investigation. We lack a dialogue between theorists and methodologists and a balance between conceptual and empirical foundations of research so as to promote valid and useful scientific knowledge.

Madhu Viswanathan presents a thoroughly integrative and original approach to the theory-method gap in contemporary basic social science and applied research. The central theme of the book, which is grounded in the best of technical and philosophical practice, is that measurement is at the heart of scientific research, and researchers must be mindful of measurement error as they test theories and search for valid empirical evidence.

Viswanathan provides a subtle, scientifically grounded framework for the conduct and interpretation of empirical research. Special attention is given to the conceptualization of measurement error and decomposition of it into unique components. He meticulously shows us how to identify and correct for measurement error with the aim of better designing measures and methods. His analytical framework for measure development and validation, summarized in Chapter 5, is a contribution of far-ranging import and one that is sure to guide researchers for years to come and accelerate the generation of new knowledge in the fields it informs.

This is a splendid book as well for students in the sense of constantly reinforcing technical learning with concrete examples. Moreover, the presentation

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explicitly links measurement to broader methodological, philosophical, and interpretive issues, a feature missing in contemporary methodological books.

In sum, Viswanathan takes us on a journey of discovery where measurement is shown to fundamentally link our ideas and speculations found in our theories to empirical evidence as manifested in the world of experience. In the process, we reach a new level of scientific maturity and come ever closer to achieving things heretofore beyond our grasp.

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