

Preface

These volumes comprise an encyclopedia of social science research methods, the first of its kind. Uniqueness explains, at least partly, why we undertook the project. It has never been done before. We also believe that such an encyclopedia is needed. What is an encyclopedia? In ancient Greek, the word signifies “all-encompassing education.” This reference set provides readers with an all-encompassing education in the ways of social science researchers. Why is this needed? No one researcher, expert or not, knows everything. He or she occasionally must look up some methodological point, for teaching as well as for research purposes. And it is not always obvious where to go, or what to look up when you get there. This encyclopedia brings together, in one place, authoritative essays on virtually all social science methods topics, both quantitative and qualitative.

A survey researcher may want to learn about longitudinal analysis in order to make sense of panel data. A student of household division of labor may want to learn the use of time diaries. A regression expert might bone up on multidimensional scaling, so as to be better able to aggregate certain measures. A deconstructionist might want to explore Foucauldian discourse analysis. An experimentalist may wish further understanding of the collinearity problem that nonexperimentalists routinely face. A feminist scholar may seek to know more about the use of films in research. A political scientist could have need of a refresher on experimental design. An anthropologist could raise a question about ethnographic realism. Perhaps a psychologist seeks to comprehend a particular measure of association. A philosopher might want to read more about the laws of social science. A sociologist may desire a review of the different approaches to evaluation research. Even in areas where one is highly expert, much can be gained. For example, in the examination of interaction effects, there are many entries from different perspectives, treating the little-used as well as the much-used techniques. These entries are written by acknowledged

leading scholars. One would have to be “more expert” than the experts not to benefit from reading them.

Besides practicing researchers and social statisticians, the encyclopedia has appeal for more general readers. Who might these people be? First, there are students, graduate and undergraduate, in the social science classes in the universities of the world. All the major branches—anthropology, communications, economics, education, geography, political science, psychology, public health, public policy, sociology, urban planning—have their students reading articles and books that require an appreciation of method for their full comprehension. The typical undergraduate needs to know how to read a contingency table, interpret a correlation coefficient, or critique a survey. There are entries on these and other such topics that are completely accessible to this student population. These sorts of entries require *no special knowledge of mathematics or statistics* to be understood, nor does the student need to have actually done research in order to grasp the essentials.

Of course, graduate students in these fields are obliged to go beyond simple reading comprehension, to actual application of these techniques. Many of the pieces make the “how-to” of the method clear, such as some of the entries on regression analysis or interviewing techniques. Then, there are more advanced entries that will challenge, but still inform, the typical graduate student. For example, the pieces on Bayesian analysis, or generalized linear modeling, will certainly allow them to sharpen their academic teeth.

In addition to researchers and students, this encyclopedia will be helpful to college-educated readers who want to understand more about social science methodology because of their work (e.g., they are journalists or city managers) or because of their pleasure (e.g., they follow social science reporting in the media). Many entries are written in ordinary English, with no special math or stat requirements, and so will be accessible to such readers. Moreover, many of the more difficult

entries are understandable in at least an introductory way, because of instructions to that effect given to our contributors. Having said that, it should be emphasized that none of the essays is “dumbed down.” Instead, they are intelligently written by recognized experts. There is nothing “cookbook” or condescending about them. In this domain of style, the only essential restriction placed on the authors was that of length, for we urged them to present their material as concisely as possible.

Our instructions to authors provided four different lengths for the entries—2,500 words (A-level), 1,000 words (B-level), 500 words (C-level), and 50 words (D-level). Of course, certain individual entries—whether A, B, C, or D level—do not conform exactly to these word counts, which are rather more guidelines than rigid standards. Length of entry was finally dictated by the importance, breadth, or, in some cases, complexity of the topic. In general, the longer the entry, the more central the topic. Examples of A-level entries are Analysis of Variance, Bayesian Inference, Case Study, and Regression. B-level topics are also important, but do not demand quite so much space to explain the concept clearly. B-level topics include Historical Method, Inferential Statistics, Misspecification, and Mixed Design. C-level entries usually treat a rather specific method or issue, such as Curvilinearity, Narrative Interview, Prisoner’s Dilemma, and Record-Check Studies. The A, B, and C entries all end with references to guide the reader further. D-level entries, on the other hand, are brief and mainly definitional. Examples of D-level entries are Gini Coefficient, Nominal, Secondary Data, and Yates’s Correction.

Altogether, there are about 1,000 entries, covering quantitative and qualitative methods, as well as the connections between them. The entries are cross-referenced to each other, as appropriate. For example, take this entry—Discrete (see Categorical, Nominal, Attribute). The number of entries, “1,000,” is not magic, nor was it a goal, but it is the number to which we kept returning in our search for a master list of entries. At the beginning of the project, we aimed to come up with an exhaustive list of all possible methods terms. We consulted written materials—subfield dictionaries, statistics encyclopedias, methods journals, publisher flyers—and individuals—members of our distinguished international board of scholars, editorial boards of methodology journals, colleagues at our home institutions and elsewhere, and, last but not least, our graduate students. As the process unfolded, some entries were culled, some consolidated, some added. We have included every methodological term

we could think of that someone reading social science research results in a book, a journal, or a newspaper might come across. In the spirit of the first encyclopedia, *l’Encyclopédie*, by Diderot and d’Alembert in 1751, we did try “to examine everything” (*Il faut tout examiner*) that concerned our enterprise. Although something is undoubtedly “not examined,” it remains for our readers to tell us what it is.

Once the entry list was basically set, we began contacting potential contributors. We were heartened by the extent of cooperation we received from the social science community. Senior and junior scholars alike gave us their best, and did so promptly. Remarkably, with a handful of exceptions, everyone met their deadlines. This is one measure, we believe, of the value these busy researchers place on this encyclopedia. As can be seen from the bylines, they compose a varied mix from the relevant disciplines, holding important university and research posts around the world.

Besides the contributors, the board, and the colleagues and students of our home institutions, there are others who are responsible for the success of the encyclopedia. Chris Rojek, senior editor at SAGE London, has to be credited with the initial idea of the project. Without that, it would not have happened. On the US side, C. Deborah Laughton, former senior editor at SAGE California, was a dedicated and tireless supporter of the encyclopedia idea from the very beginning. Without her enthusiasm and insight, the final product would have lacked much. Rolf Janke, vice president at SAGE, was a central source of organization strength and encouragement from the home office. Also at SAGE, Vincent Burns, technical editor, was vital in helping piece together the Web site, the database, and the massive manuscript data files. As well, we should mention Melanie Birdsall, production editor, who patiently shepherded us through the alphabet soup of page proofs. Finally, to save the best for last, we must thank Eileen Haddox, our developmental editor. Eileen made it work by doing the detail work. She sent out the contracts, reminded the authors, logged in the contributions, and sent text and corrections back and forth, in the end making the whole corpus ready for the printer. Always, she labored with efficiency and good cheer. In those realms, she set standards that we, the editors of the encyclopedia, tried to achieve. Sometimes we did.

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Introduction

Social science methodology can be said to have entered our consciousness by the late 19th century when Emile Durkheim penned *The Rules of Sociological Method*, laying the foundation for the systematic understanding and analysis of social phenomena. From that time, it has seen continuous growth characterized by an exponential development over the last few decades of the 20th century. The development came in terms of both the width and the depth of our methodological know-how. The broad range of methods applicable in the wide circle of social science disciplines, and the sophistication and level in the advancement of some analytical approaches and techniques, would have been unthinkable merely a few score years ago. FOCUS GROUP and THICK DESCRIPTION, for example, have virtually become lingua franca among many social science researchers, regardless of their disciplinary orientation. The methods for dealing with MISSING DATA and NONRESPONSE, to take other examples, have advanced so much that specialized workshops on such issues are a perennial favorite among analysts of SURVEY DATA.

It is only natural, at the beginning of a new century, for us to take stock of the entire spectrum of our social science methodological knowledge, even though it is impossible and impractical to include every method that has ever been used in the social sciences. The cardinal aim of this encyclopedia is to provide our readers—be they students, academics, or applied researchers—with an introduction to a vast array of research methods by giving an account of their purposes, principles, developments, and applications. The approximately 1,000 entries, many of which are extensive treatments of the topics and contain recent developments, can be of great use to the novice or the experienced researcher alike.

To accomplish this goal, we offer two major types of entries: Some contain only a definition of no longer than a paragraph or two. These give the reader a quick explanation of a methodological term. True to

the encyclopedic form, many other entries are topical treatments or essays that discuss—at varying lengths, often with examples and sometimes with graphics—the nature, the history, the application, and the implication of using a certain method. Most of these entries also give suggested readings and references for the reader to pursue a topic further. These are part and parcel of the encyclopedia and are invaluable for those who would like to delve into the wonder world of research methods. To help provide a more complete explanation than is often achieved within the scope of a single article, we employ small capital letters, such as those appearing in the first paragraph of this introduction, that refer the reader to related terms that are explained elsewhere in the encyclopedia.

With such a variety of specialized essays to write, we are fortunate to have been able to count on the support of our board members and authors, who contributed many a coherent introduction to a method with definitiveness and thoroughness, often with great flair as well. Sometimes, topics are treated in such a novel way that they are not only pleasurable but also thought-provoking to read. For instance, entries such as the essay on ECONOMETRICS by Professor Damodar Gujarati are a pleasant surprise. Rather than merely introducing the topic with the types of methods and models that econometricians use and nothing else, Gujarati takes us on a journey from the ordinary to the extraordinary. He begins with three quotations that illustrate the broad scope of econometrics; here the simple, usual approach of using quotations accomplishes the seemingly undoable task of defining the terrain on which econometricians work and play. He then walks us twice through the research process, from economic theory to data and models to analysis, once in principle and the second time with an example. Such a process is what many of us preach every day but seldom think of when writing an essay for an encyclopedia. Gujarati uses the ordinary process of going about economic research to achieve an extraordinary,

profound impact—an impact that will leave a reader thinking about, instead of just the methods and models, the fundamental purpose of econometrics. Entries like this give us knowledge and food for thought.

The diversity of our entries is also great. To take one of many possible contrasts, some of our entries deal with very philosophical issues, such as POSTSTRUCTURALISM, that might appear to be out of step with a set of volumes concerned with methods of research, whereas others discuss advanced statistical techniques that might similarly be viewed as not part of social science research methodology. However, we have taken the view that both are necessary. On the one hand, all researchers need to be aware of the EPISTEMOLOGICAL issues that influence both the nature of RESEARCH QUESTIONS and the ASSUMPTIONS that underpin aspects of the research process; on the other hand, we all need to be aware of the full panoply of ways of analyzing

quantitative data, so that the most appropriate and robust techniques can be applied in different situations. It is only when we are knowledgeable about the choices available to us—whether epistemological, statistical, or whatever—that we can completely develop our craft as social researchers.

Examples of excellent treatment of a whole host of topics abound in the following pages and volumes. By assembling into one encyclopedia entries of varied origin that serve different research purposes, we, the editors, hope that readers will come to appreciate the rich heritage of our social science methodology and, more importantly, will be able to benefit from this immense source of methodological expertise in advancing their research.

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