

BOOK REVIEW

Dyadic data analysis.

David A. Kenny, Deborah A. Kashy, & William L. Cook (2006). The Guilford Press. 458 pp.

reviewed by Larry Kurdek
Department of Psychology
Wright State University

Anyone who has collected data from both members of a dyad has faced challenges in analyzing those data. Should I analyze data for husbands and wives separately or together? How do I assess husbands' influences on wives and wives' influences on husbands? How can I analyze data with both partners from gay or lesbian couples since partners have no formal distinguishable social role such as "husband" and "wife"? Typically, standard textbooks in statistics and research methods have been of limited use in answering such questions, often only citing dyad-level data as one example of how the assumption regarding independence of observations can be violated. Thus, the book on dyadic data analysis by Kenny, Kashy, and Cook fills a unique void in the armamentarium of researchers interested in couples.

The book is divided into 15 chapters. Four of these deal with conceptual issues such as the meaning and measurement of interdependence (Chapter 1 and Chapter 2), classifying predictors or independent variables as between- or within-dyads (Chapter 3), and distinguishing among various indices of correspondence between members of a dyad (Chapter 12). Two of these deal with general aspects of the two statistical techniques most commonly used to analyze dyadic data—multilevel modeling (Chapter 4) and structural equation modeling (Chapter 5). One of these (Chapter 6) deals with estimating and testing differences between correlations and variances for members of dyads. Seven of these deal with specific designs, such as the actor-partner interdependence model (Chapter 7), social relations designs (Chapters 8 and 9), the "one-with-many" design in which one person is a member of multiple dyads (Chapter 10), social network designs (Chapter 11), and longitudinal designs (Chapters 13 and 14). The book ends (Chapter 15) with an overview of some specialized designs, and a listing of "The seven deadly sins of dyadic data analysis" that no doubt emerged from the authors' joint experience in reviewing scores of submissions to journals.

There are several notable features of the book. First, the writing is very clear and for the most part not very technical. Any graduate student with a general background in research design and statistics covering ANOVA and regression (and even any seasoned professional) has the necessary background to understand each chapter. Second, because the authors teach by example, there are actual examples worked through to illustrate important points in each chapter. Moreover, Kenny's website (<http://davidakenny.net/kkc/kkc.htm>) has a section devoted to the book in which corrections, clarifications, elaborations, and—most critically—data and software program files—are provided. Readers can quickly get updates to the book and retrieve the files they need to work through each example on their own. Syntax files are provided for such widely available programs as SPSS, SAS, HLM, AMOS, and EQS.

Consider measurement models to gain df for allowing random slopes

Assess effects of difference models of error covariance