Record Nr. UNINA9910337959203321 Autore Mellenbergh Gideon J **Titolo** Counteracting Methodological Errors in Behavioral Research / / by Gideon J. Mellenbergh Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-12272-7 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XVI, 376 p. 48 illus., 4 illus. in color.) 150.72 Disciplina Soggetti Psychology—Methodology **Psychometrics** Education—Research Sociology—Research Psychology, Industrial Psychological Methods/Evaluation Research Methods in Education Research Methodology Industrial and Organizational Psychology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1 Introduction -- 2 Probability sampling -- 3 Nonprobability sampling -- 4 Random assignment -- 5 Propensity scores -- 6 Situational bias -- 7 Random measurement error -- 8 Systematic measurement error -- 9 Unobtrusive measurements -- 10 Test dimensionality -- 11 Coefficients for bivariate relations -- 12 Null hypothesis testing -- 13 Unstandardized effect sizes -- 14 Pretest-posttest change -- 15 Reliability -- 16 Missing data -- 17 Outliers -- 18 Interactions and specific hypotheses -- 19 Publishing -- 20 Scientific misconduct. Sommario/riassunto This book describes methods to prevent avoidable errors and to correct unavoidable ones within the behavioral sciences. A distinguishing feature of this work is that it is accessible to students and researchers of substantive fields of the behavioral sciences and related fields (e.g., health sciences and social sciences). Discussed are methods for errors that come from human and other factors, and methods for errors

within each of the aspects of empirical studies. This book focuses on how empirical research is threatened by different types of error, and how the behavioral sciences in particular are vulnerable due to the study of human behavior and human participation in studies. Methods to counteract errors are discussed in depth including how they can be applied in all aspects of empirical studies: sampling of participants, design and implementation of the study, instrumentation and operationalization of theoretical variables, analysis of the data, and reporting of the study results. Students and researchers of methodology, psychology, education, and statistics will find this book to be particularly valuable. Methodologists can use the book to advice clients on methodological issues of substantive research.