1. Record Nr. UNINA9910484708003321 Autore Kleinke Kristian Titolo Applied multiple imputation : advantages, pitfalls, new developments and applications in R / / by Kristian Kleinke, Jost Reinecke, Daniel Salfrán, Martin Spiess Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-38164-1 ISBN Edizione [1st ed. 2020.] 1 online resource (XI, 292 p. 20 illus., 3 illus. in color.) Descrizione fisica Collana Statistics for Social and Behavioral Sciences, , 2199-7357 001.422 Disciplina Soggetti Statistics Psychology—Methodology Psychological measurement R (Computer program language) Statistics for Social Sciences, Humanities, Law Psychological Methods/Evaluation Statistics for Life Sciences, Medicine, Health Sciences Statistical Theory and Methods Statistics and Computing/Statistics Programs Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1 Introduction and Basic Concepts -- 2 Missing Data Mechanism and Nota di contenuto Ignorability -- 3 Missing Data Methods -- 4 Multiple Imputation: Theory -- 5 Multiple Imputation: Application -- 6 Multiple Imputation: New Developments -- A Appendices -- Index. Sommario/riassunto This book explores missing data techniques and provides a detailed and easy-to-read introduction to multiple imputation, covering the theoretical aspects of the topic and offering hands-on help with the implementation. It discusses the pros and cons of various techniques and concepts, including multiple imputation quality diagnostics, an important topic for practitioners. It also presents current research and new, practically relevant developments in the field, and demonstrates the use of recent multiple imputation techniques designed for

situations where distributional assumptions of the classical multiple

imputation solutions are violated. In addition, the book features numerous practical tutorials for widely used R software packages to generate multiple imputations (norm, pan and mice). The provided R code and data sets allow readers to reproduce all the examples and enhance their understanding of the procedures. This book is intended for social and health scientists and other quantitative researchers who analyze incompletely observed data sets, as well as master's and PhD students with a sound basic knowledge of statistics.