1. Record Nr. UNINA9910462955703321 Autore Hardin James W (James William) Titolo Generalized estimating equations // James W. Hardin, Joseph M. Hilbe Pubbl/distr/stampa Boca Raton:,: CRC Press,, 2013 **ISBN** 0-429-11103-7 1-4398-8114-6 Edizione [2nd ed.] Descrizione fisica 1 online resource (274 p.) Altri autori (Persone) HilbeJoseph Disciplina 519.5/44 Soggetti Generalized estimating equations Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Front Cover; Contents; Preface; Chapter 1: Introduction; Chapter 2: Model Construction and Estimating Equations; Chapter 3: Generalized Estimating Equations; Chapter 4: Residuals, Diagnostics, and Testing; Chapter 5: Programs and Datasets; References; Back Cover Generalized Estimating Equations, Second Edition updates the best-Sommario/riassunto selling previous edition, which has been the standard text on the subject since it was published a decade ago. Combining theory and application, the text provides readers with a comprehensive discussion of GEE and related models. Numerous examples are employed throughout the text, along with the software code used to create, run, and evaluate the models being examined. Stata is used as the primary

selling previous edition, which has been the standard text on the subject since it was published a decade ago. Combining theory and application, the text provides readers with a comprehensive discussion of GEE and related models. Numerous examples are employed throughout the text, along with the software code used to create, run, and evaluate the models being examined. Stata is used as the primary software for running and displaying modeling output; associated R code is also given to allow R users to replicate Stata examples. Specific examples of SAS usage are provided in the final chapter as well as on the book's website. This second edition incorporates comments and suggestions from a variety of sources, including the Statistics.com course on longitudinal and panel models taught by the authors. Other enhancements include an examination of GEE marginal effects; a more thorough presentation of hypothesis testing and diagnostics, covering competing hierarchical models; and a more detailed examination of previously discussed subjects. Along with doubling the number of end-of-chapter exercises, this edition expands discussion of various models

associated with GEE, such as penalized GEE, cumulative and multinomial GEE, survey GEE, and quasi-least squares regression. It also offers a thoroughly new presentation of model selection procedures, including the introduction of an extension to the QIC measure that is applicable for choosing among working correlation structures. See Professor Hilbe discuss the book--CHAPTER 1 Preface Second Edition We are pleased to offer this second edition to Generalized Estimating Equations. This edition benefits from comments and suggestions from various sources given to us during the past ten years since the first edition was published. As a consequence, we have enhanced the text with a number of additions, including more detailed discussions of previously presented topics, program code for examples in text, and examination of entirely new topics related to GEE and the estimation of clustered and longitudinal models. We have also expanded discussion of various models associated with GEE; penalized GEE, survey GEE, and quasi-least squares regression, as well as the number of exercises given at the end of each chapter. We have also added material on hypothesis testing and diagnostics, including discussion of competing hierarchical models. We have also introduced more examples, and expanded the presentation of examples utilizing R software. The text has grown by 40 pages. This edition also introduces alternative models for ordered categorical outcomes and illustrates model selection approaches for choosing among various candidate specifications. We have expanded our coverage of model selection criterion measures and introduce an extension of the QIC measure which is applicable for choosing among working correlation structures (see 5.1.2 in particular). This is currently a subject of considerable interest among statisticians having an interest in GEE--