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Nota di contenuto	Part I. General Perspectives on Psychometrics. 1. Early Roots of Psychometrics Before Francis Galton (Willem J. Heiser) -- 2. The Janus Face of Psychometrics (Paul De Boeck and L. Robert Gore) -- 3. Psychological and Educational Testing and Decision Making: The Lack of Knowledge Dissemination in Textbooks and Test Guidelines (Rob R. Meijer, A. Susan M. Niessen, and Marvin Neumann) -- 4. Trustworthy Artificial Intelligence in Psychometrics (Bernard P. Veldkamp) -- 5. Psychological Constructs as Organizing Principles (Denny Borsboom) -- Part II. Factor Analysis and Classical Test Theory. 6. A New Expression and Interpretation of Coefficient Omega Under the Congeneric One-Factor Model (David J. Hessen) -- 7. A Factor Analysis Approach to Item-Level Change Score Reliability (Dylan Molenaar) -- 8. Handling Missing Data in Principal Component Analysis Using Multiple Imputation (Joost R. van Ginkel) -- 9. Quantifying the Bias of Non-

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Sommario/riassunto

This book 'Essays on Contemporary Psychometrics' provides an overview of contemporary psychometrics, the science devoted to the advancement of quantitative measurement practices in psychology, education and the social sciences. The volume consists of four parts, each having several chapters on cutting-edge work in the field. Part I, General Perspectives on Psychometrics, includes expert views on topics such as psychological models vs. measurement models, using tests in decision making, artificial intelligence, and psychometric network models. Part II, Factor Analysis and Classical Test Theory, the type of psychometrics that is still used most often in the social and behavioral sciences, includes state-of-the-art contributions on test-score reliability, change-score reliability, handling missing data in principal component analysis, test equating, and conditional standard errors of measurement. Part III, Item Response Theory, the leading form of psychometrics in modern educational measurement, includes discussions of sampling from many conditional distributions, transparent score reporting, nonparametric item response theory, and targeted testing. Part IV, New Psychometrics, discusses recently developed ideas beyond classical test theory and item response theory, including topics related to computer adaptive testing, response-time modelling, validity indices, diagnostic classification models, and the sparse latent class model for ordinal measurements. Together, these four parts provide an overview of the current state-of-the-art in psychometrics in educational measurement. They are a valuable source of information for graduate students who (intend to) study psychometrics and need an overview of the field, and for researchers interested in the current developments in the field. Chapters [3], [5], [8], [16] and [19] are available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.
