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Titolo	Fundamentals of Applied Multidimensional Scaling for Educational and Psychological Research // by Cody S. Ding
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ISBN	3-319-78172-3
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (197 pages)
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Soggetti	Statistics Psychometrics Education—Research Statistics for Social Sciences, Humanities, Law Research Methods in Education
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: Data issues of MDS -- Chapter 3: Metric vs non-metric MDS model -- Chapter 4: Model selection and interpretation -- Chapter 5: Basic MDS analysis -- Chapter 6: Visualization of data structure by MDS -- Chapter 7: Individual differences MDS analysis -- Chapter 8: MDS Preference Analysis -- Chapter 9: Configuration Similarities -- Chapter 10: Latent Profile analysis -- Chapter 11: Longitudinal analysis using MDS -- Chapter 12: Testing pattern hypotheses with MDS -- Chapter 13: Mean-level change vs. pattern change -- Chapter 14: Historical review.
Sommario/riassunto	This book explores the fundamentals of multidimensional scaling (MDS) and how this analytic method can be used in applied setting for educational and psychological research. The book tries to make MDS more accessible to a wider audience in terms of the language and examples that are more relevant to educational and psychological research and less technical so that the readers are not overwhelmed by equations. The goal is for readers to learn the methods described in this book and immediately start using MDS via available software programs. The book also examines new applications that have

previously not been discussed in MDS literature. It should be an ideal book for graduate students and researchers to better understand MDS. Fundamentals of Applied Multidimensional Scaling for Educational and Psychological Research is divided into three parts. Part I covers the basic and fundamental features of MDS models pertaining to applied research applications. Chapters in this section cover the essential features of data that are typically associated with MDS analysis such as preference ration or binary choice data, and also looking at metric and non-metric MDS models to build a foundation for later discussion and applications in later chapters. Part II examines specific MDS models and its applications for education and psychology. This includes spatial analysis methods that can be used in MDS to test clustering effect of items and individual differences MDS model (INDSCAL). Finally, Part III focuses on new applications of MDS analysis in these research fields. These new applications consist of profile analysis, longitudinal analysis, mean-level change, and pattern change. The book concludes with a historical review of MDS development as an analytical method and a look to future directions. .
