

1. Record Nr.	UNINA9910647392503321
Autore	Paez Antonio
Titolo	Discrete Choice Analysis with R / / by Antonio Páez, Geneviève Boisjoly
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783031207198 303120719X
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (349 pages)
Collana	Use R!, , 2197-5744
Disciplina	780 300.15195
Soggetti	Statistics Social sciences - Statistical methods Sampling (Statistics) Statistical Theory and Methods Statistics in Social Sciences, Humanities, Law, Education, Behavioral Sciences, Public Policy Methodology of Data Collection and Processing Ciències socials Estadística Models matemàtics Mostreig (Estadística) R (Llenguatge de programació) Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Data, Models, and Software -- 2. Exploratory Data Analysis -- 3. Fundamental Concepts -- 4. 4 Logit -- 5. Practical Issues in the Specification and Estimation of Discrete Choice Models -- 6. Behavioral Insights from Choice Models -- 7. Non-Proportional Substitution Patterns I: Generalized Extreme Value Models -- 8. Non-Proportional Substitution Patterns II: The Probit Model -- 9. Dealing with Heterogeneity I: The Latent Class Logit Model -- 10 Dealing with Heterogeneity II: The Mixed Logit Model -- 11. Models for Ordinal

Sommario/riassunto

This book is designed as a gentle introduction to the fascinating field of choice modeling and its practical implementation using the R language. Discrete choice analysis is a family of methods useful to study individual decision-making. With strong theoretical foundations in consumer behavior, discrete choice models are used in the analysis of health policy, transportation systems, marketing, economics, public policy, political science, urban planning, and criminology, to mention just a few fields of application. The book does not assume prior knowledge of discrete choice analysis or R, but instead strives to introduce both in an intuitive way, starting from simple concepts and progressing to more sophisticated ideas. Loaded with a wealth of examples and code, the book covers the fundamentals of data and analysis in a progressive way. Readers begin with simple data operations and the underlying theory of choice analysis and conclude by working with sophisticated models including latent class logit models, mixed logit models, and ordinal logit models with taste heterogeneity. Data visualization is emphasized to explore both the input data as well as the results of models. This book should be of interest to graduate students, faculty, and researchers conducting empirical work using individual level choice data who are approaching the field of discrete choice analysis for the first time. In addition, it should interest more advanced modelers wishing to learn about the potential of R for discrete choice analysis. By embedding the treatment of choice modeling within the R ecosystem, readers benefit from learning about the larger R family of packages for data exploration, analysis, and visualization.
