1. Record Nr. UNINA9910480520703321

Autore Maruyama Geoffrey

Titolo Basics of structural equation modeling [[electronic resource] /] /

Geoffrey M. Maruyama

Pubbl/distr/stampa Thousand Oaks, Calif., : SAGE, c1998

ISBN 1-4833-4510-6

1-4522-5020-0

Descrizione fisica 1 online resource (328 p.)

Disciplina 519.535

Soggetti Multivariate analysis

Social sciences - Statistical methods

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 (p. 299-305) and indexes.

Nota di contenuto Background. What does it mean to model hypothesized causal

processes with nonexperimental data? -- History and logic of structural equation modeling -- Basic approaches to modeling with single observed measures of theoretical variables. The basics: path analysis and partitioning of variance -- Effects of collinearity on regression and path analysis -- Effects of random and nonrandom error on path models -- Recursive and longitudinal models: where causality goes in more than one direction and where data are collected over time -- Factor analysis and path modeling. Introducing the logic of factor analysis and multiple indicators to path modeling -- Latent variable structural equation models. Putting it all together: latent variable structural equation modeling -- Using latent variable structural equation modeling to examine plausibility of models -- Logic of alternative models and significance tests -- Variations on the basic latent variable structural equation to matrix algebra and structural equation

modeling.

Sommario/riassunto With the availability of software programs such as LISREL, EQS, and

AMOS modeling techniques have become a popular tool for formalized presentation of the hypothesized relationships underlying correlational

research and for testing the plausibility of hypothesizing for a particular data set. The popularity of these techniques, however, has often led to misunderstandings of them, particularly by students being exposed to them for the first time. Through the use of careful narrative explanation, Basics of Structural Equation Modeling describes the logic underlying structural equation modeling (SEM) approaches, describes how SEM approaches relate to techniques like regression and factor analysis, analyzes the strengths and shortcomings of SEM as compared to alternative methodologies, and explores the various methodologies for analyzing structural equation data.