By charting changes over time and investigating whether and when events occur, researchers reveal the temporal rhythms of our lives.

Since Charles Spearman published his seminal paper on factor analysis in 1904 and Karl Joresk? og replaced the observed variables in an econometric structural equation model by latent factors in 1970, causal modelling by means of latent variables has become the standard in the social and behavioural sciences. Indeed, the central va- ables that social and behavioural theories deal with, can hardly ever be identi?ed as observed variables. Statistical modelling has to take account of measurement - rors and invalidities in the observed variables and so address the underlying latent variables. Moreover, during the past decades it has been widely agreed on that serious causal modelling should be based on longitudinal data. It is especially in the ?eld of longitudinal research and analysis, including panel research, that progress has been made in recent years. Many comprehensive panel data sets as, for example, on human development and voting behaviour have become available for analysis. The number of publications based on longitudinal data has increased immensely. Papers with causal claims based on cross-sectional data only experience rejection just for that reason.

Longitudinal Analysis provides an accessible, application-oriented treatment of introductory and advanced linear models for within-person fluctuation and change. Organized by research design and data type, the text uses in-depth examples to provide a complete description of the model-building process. The core longitudinal models and their extensions are presented within a multilevel modeling framework, paying careful attention to the modeling concerns that are unique to longitudinal data. Written in a conversational style, the text provides verbal and visual interpretation of model equations to aid in their translation to empirical research results. Overviews and summaries, boldfaced key terms, and review questions will help readers synthesize the key concepts in each chapter. Written for non-mathematically-oriented readers, this text features: A description of the data manipulation steps required prior to model estimation so readers can more easily apply the steps to their own data An emphasis on how the terminology, interpretation, and estimation of familiar general linear models relates to those...
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First published Open Access under a Creative Commons license as What is Quantitative Longitudinal Data Analysis?, this title is now also available as part of the Bloomsbury Research Methods series. Across the social sciences, there is widespread agreement that quantitative longitudinal research designs offer analysts powerful scientific data resources. But, to date, many texts on analysing longitudinal social analysis surveys have been written from a statistical, rather than a social science data analysis perspective and they lack adequate coverage of common practical challenges associated with social science data analyses. This book provides a practical and up-to-date introduction to influential approaches to quantitative longitudinal data analysis in the social sciences. The book introduces definitions and terms, explains the relative attractions of such a longitudinal design, and offers an introduction to the main techniques of analysis, explaining their requirements, statistical properties and their substantive contribution.

This second edition has been completely revised and expanded to become the most up-to-date and thorough professional reference text in this fast-moving area of biostatistics. It contains an additional two chapters on fully parametric models for discrete repeated measures data and statistical models for time-dependent predictors.

Purpose: The purpose of this dissertation was to provide longitudinal evidence on heart rate variability biofeedback (HRVB) as an anti-craving intervention for college students recovering from substance use disorder (SUD). Methods: Previous studies showed promise of the therapeutic potential of HRVB to reduce substance craving. Gaps in the literature indicated the need for a longitudinal examination of craving changes that takes individual differences into consideration. Data from 46 college students recovering from SUD were used to examine craving changes before and during an eight-session HRVB intervention. Participants were assessed at four occasions in the control condition over the first 12 weeks followed by 8 occasions in the experimental condition, separated by an 11-week rest period. A longitudinal multilevel modeling approach was used with time at level-1 nested within persons at level-2. Unconditional and conditional multilevel models of change were estimated to model craving trajectories and predictor relationships over time. Results: Significant reductions in substance craving were observed during HRVB compared to waitlist. HRVB seemed to enhance the
efficacy of conventional therapies by producing craving reductions that were not evident prior to the HRVB intervention despite usual treatment. A continued daily HRVB practice of more than 12 minutes was found to enhance treatment as usual outcomes and contribute to greater craving reductions over time. In our sample, younger participants seemed to be more committed to daily HRVB practice, although many did not achieve the recommended daily practice of 15 minutes twice daily. Increases in depressive symptoms were found to attenuate the effects of HRVB on craving. Anxiety and perceived stress were not significantly associated with craving in this study. The true R2 for the final model indicated that 20.5% of the variance in craving was explained by age, daily HRVB≥12 minutes, and the within-person aspect of depression. Conclusions: HRVB is an easily accessible and affordable intervention that shows promise as a complementary anti-craving intervention. The outcomes of this study have implications for hypothesized HRVB practice-dose relationships. Nurses may help persons recovering from SUD to better manage the symptom of craving by the routine and strategic use of personal HRVB practice.

Research today demands the application of sophisticated and powerful research tools. Fulfilling this need, The Oxford Handbook of Quantitative Methods is the complete tool box to deliver the most valid and generalizable answers to today’s complex research questions. It is a one-stop source for learning and reviewing current best-practices in quantitative methods as practiced in the social, behavioral, and educational sciences. Comprising two volumes, this handbook covers a wealth of topics related to quantitative research methods. It begins with essential philosophical and ethical issues related to science and quantitative research. It then addresses core measurement topics before delving into the design of studies. Principal issues related to modern estimation and mathematical modeling are also detailed. Topics in the handbook then segway into the realm of statistical inference and modeling with chapters dedicated to classical approaches as well as modern latent variable approaches. Numerous chapters associated with longitudinal data and more specialized techniques round out this broad selection of topics. Comprehensive, authoritative, and user-friendly, this two-volume set will be an indispensable resource for serious researchers across the social, behavioral, and educational sciences.

Drawing from the authors’ own work and from the most recent developments in the field, Missing Data in Longitudinal Studies: Strategies for Bayesian Modeling and Sensitivity Analysis describes a comprehensive Bayesian approach for drawing inference from incomplete data in longitudinal studies. To illustrate these methods, the authors employ several data sets throughout that cover a range of study designs, variable types, and missing data issues. The book first reviews modern approaches to formulate and interpret regression models for longitudinal data. It then discusses key ideas in Bayesian inference, including specifying prior distributions, computing posterior distribution, and assessing model fit. The book carefully describes the assumptions needed to make inferences about a full-data distribution from incompletely observed data. For settings with ignorable dropout, it emphasizes the importance of covariance models for inference about the mean while for nonignorable dropout, the book studies a variety of models in detail. It concludes with three case studies that highlight important features of the Bayesian approach for handling nonignorable missingness. With suggestions for further reading at the end of most chapters as well as many applications to the health sciences, this resource offers a unified Bayesian approach to handle missing data in longitudinal studies.

The book features many figures and tables illustrating longitudinal data and numerous homework problems. The associated web site contains many longitudinal data sets, examples of computer code, and labs to re-enforce the material. Weiss emphasizes continuous data rather than discrete data, graphical and covariance methods, and generalizations of regression rather than generalizations of analysis of variance.

This book is unique in its focus on showing students in the behavioral sciences how to analyze longitudinal data using R software. The book focuses on application, making it practical and
accessible to students in psychology, education, and related fields, who have a basic foundation in statistics. It provides explicit instructions in R computer programming throughout the book, showing students exactly how a specific analysis is carried out and how output is interpreted.

This volume gathers refereed papers presented at the 1994 UCLA conference on "La tent Variable Modeling and Application to Causality." The meeting was organized by the UCLA Interdivisional Program in Statistics with the purpose of bringing together a group of people who have done recent advanced work in this field. The papers in this volume are representative of a wide variety of disciplines in which the use of latent variable models is rapidly growing. The volume is divided into two broad sections. The first section covers Path Models and Causal Reasoning and the papers are innovations from contributors in disciplines not traditionally associated with behavioural sciences, (e.g. computer science with Judea Pearl and public health with James Robins). Also in this section are contributions by Rod McDonald and Michael Sobel who have a more traditional approach to causal inference, generating from problems in behavioural sciences. The second section encompasses new approaches to questions of model selection with emphasis on factor analysis and time varying systems. Amemiya uses nonlinear factor analysis which has a higher order of complexity associated with the identifiability conditions. Muthen studies longitudinal hierarchical models with latent variables and treats the time vector as a variable rather than a level of hierarchy. Deleeuw extends exploratory factor analysis models by including time as a variable and allowing for discrete and ordinal latent variables. Arminger looks at autoregressive structures and Bock treats factor analysis models for categorical data.

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taught in psychology, human development and family studies, education, business, and other behavioral, social, and health sciences. The book's accessible approach will also help those trying to learn on their own. Only familiarity with general linear models (regression, analysis of variance) is needed for this text.

Diary Methods, sometimes known as intensive repeated measures or ecological assessments, are an important method for social and personality psychologists. The volume begins with a rationale for such methods, with an emphasis on social and personality psychology, and then provides a non-technical, accessible description of how to use such methods, including advice on study design, data analysis, and preparation of papers. Both interval contingent methods (e.g., daily diaries) and event contingent methods (e.g., social interaction diaries) are covered. The author, John B. Nezlek, has used these methods in his own scholarly work for over 30 years and has written this book to provide an introduction to these methods for those who are not familiar with them. This book will be perfect for advanced students and researchers in social and personality psychology and related disciplines who use and want to use diary methods in their research. The SAGE Library of Methods in Social and Personality Psychology is a new series of books launching in early 2011 to provide students and researchers with an understanding of the methods and techniques essential to conducting cutting-edge research. Each volume explains a specific topic and has been written by an active scholar (or scholars) with expertise in that particular methodological domain. Assuming no prior knowledge of the topic, the volumes are clear and accessible for all readers. In each volume, a topic is introduced, applications are discussed, and readers are led step by step through worked examples. In addition, advice about how to interpret and prepare results for publication are presented. The Library should be particularly valuable for advanced students and academics who want to know more about how to use research methods in social and personality psychology.

A practical guide to the most important techniques available for longitudinal data analysis, essential for non-statisticians and researchers.

First Published in 2010. Routledge is an imprint of Taylor & Francis, an informa company.

This book demonstrates how to use multilevel and longitudinal modeling techniques available in the IBM SPSS mixed-effects program (MIXED). Annotated screen shots provide readers with a step-by-step understanding of each technique and navigating the program. Readers learn how to set up, run, and interpret a variety of models. Diagnostic tools, data management issues, and related graphics are introduced throughout. Annotated syntax is also available for those who prefer this approach. Extended examples illustrate the logic of model development to show readers the rationale of the research questions and the steps around which the analyses are structured. The data used in the text and syntax examples are available at www.routledge.com/9780415817110. Highlights of the new edition include: Updated throughout to reflect IBM SPSS Version 21. Further coverage of growth trajectories, coding time-related variables, covariance structures, individual change and longitudinal experimental designs (Ch.5). Extended discussion of other types of research designs for examining change (e.g., regression discontinuity, quasi-experimental) over time (Ch.6). New examples specifying multiple latent constructs and parallel growth processes (Ch. 7). Discussion of alternatives for dealing with missing data and the use of sample weights within multilevel data structures (Ch.1). The book opens with the conceptual and methodological issues associated with multilevel and longitudinal modeling, followed by a discussion of SPSS data management techniques which facilitate working with multilevel, longitudinal, and cross-classified data sets. Chapters 3 and 4 introduce the basics of multilevel modeling: developing a multilevel model, interpreting output, and trouble-shooting common programming and modeling problems. Models for investigating individual and organizational change are presented in chapters 5 and 6, followed by models with multivariate outcomes in chapter 7. Chapter 8 provides an illustration of multilevel models with cross-classified data structures. The book concludes with ways to expand on the various multilevel and longitudinal modeling techniques and issues when
conducting multilevel analyses. Ideal as a supplementary text for graduate courses on multilevel and longitudinal modeling, multivariate statistics, and research design taught in education, psychology, business, and sociology, this book's practical approach also appeals to researchers in these fields. The book provides an excellent supplement to Heck & Thomas's An Introduction to Multilevel Modeling Techniques, 2nd Edition; however, it can also be used with any multilevel and/or longitudinal modeling book or as a stand-alone text.

This book offers a complete, practical guide to doing an intensive longitudinal study with individuals, dyads, or groups. It provides the tools for studying social, psychological, and physiological processes in everyday contexts, using methods such as diary and experience sampling. A range of engaging, worked-through research examples with datasets are featured. Coverage includes how to: select the best intensive longitudinal design for a particular research question, apply multilevel models to within-subject designs, model within-subject change processes for continuous and categorical outcomes, assess the reliability of within-subject changes, assure sufficient statistical power, and more. Several end-of-chapter write-ups illustrate effective ways to present study findings for publication. Datasets and output in SPSS, SAS, Mplus, HLM, MLwiN, and R for the examples are available on the companion website (www.intensivelongitudinal.com).

This book provides a comprehensive treatment of linear mixed models for continuous longitudinal data. Next to model formulation, this edition puts major emphasis on exploratory data analysis for all aspects of the model, such as the marginal model, subject-specific profiles, and residual covariance structure. Further, model diagnostics and missing data receive extensive treatment. Sensitivity analysis for incomplete data is given a prominent place. Most analyses were done with the MIXED procedure of the SAS software package, but the data analyses are presented in a software-independent fashion.

Although many books currently available describe statistical models and methods for analyzing longitudinal data, they do not highlight connections between various research threads in the statistical literature. Responding to this void, Longitudinal Data Analysis provides a clear, comprehensive, and unified overview of state-of-the-art theory and applications. It also focuses on the assorted challenges that arise in analyzing longitudinal data. After discussing historical aspects, leading researchers explore four broad themes: parametric modeling, nonparametric and semiparametric methods, joint models, and incomplete data. Each of these sections begins with an introductory chapter that provides useful background material and a broad outline to set the stage for subsequent chapters. Rather than focus on a narrowly defined topic, chapters integrate important research discussions from the statistical literature. They seamlessly blend theory with applications and include examples and case studies from various disciplines. Destined to become a landmark publication in the field, this carefully edited collection emphasizes statistical models and methods likely to endure in the future. Whether involved in the development of statistical methodology or the analysis of longitudinal data, readers will gain new perspectives on the field.

Popular in the First Edition for its rich, illustrative examples and lucid explanations of the theory and use of hierarchical linear models (HLM), the book has been reorganized into four parts with four completely new chapters. The first two parts, Part I on "The Logic of Hierarchical Linear Modeling" and Part II on "Basic Applications" closely parallel the first nine chapters of the previous edition with significant expansions and technical clarifications, such as: * An intuitive introductory summary of the basic procedures for estimation and inference used with HLM models that only requires a minimal level of mathematical sophistication in Chapter 3 * New section on multivariate growth models in Chapter 6 * A discussion of research synthesis or meta-analysis applications in Chapter 7 * Data analytic advice on centering of level-1 predictors and new material on plausible value intervals and robust standard estimators.
using the three leading software platforms, followed by a set of application articles based on recent work published in leading journals and as part of doctoral dissertations. The "guide" portion consists of three chapters by the editor, covering basic to intermediate use of SPSS, SAS, and HLM for purposes for hierarchical linear modelling, while the "applications" portion consists of a dozen contributions in which the authors emphasize how-to and methodological aspects and show how they have used these techniques in practice.

When determining the most appropriate method for analyzing longitudinal data, you must first consider what research question you want to answer. McArdle and Nesselroade identify five basic purposes of longitudinal structural equation modeling. For each purpose, they present the most useful strategies and models. Two important but underused approaches are emphasized: multiple factorial invariance over time and latent change scores. This volume covers a wealth of models in a straightforward, understandable manner. Rather than overwhelm the reader with an extensive amount of algebra, the authors use path diagrams and emphasize methods that are appropriate for many uses. Book jacket.

The contributors to Best Practices in Quantitative Methods envision quantitative methods in the 21st century, identify the best practices, and, where possible, demonstrate the superiority of their recommendations empirically. Editor Jason W. Osborne designed this book with the goal of providing readers with the most effective, evidence-based, modern quantitative methods and quantitative data analysis across the social and behavioral sciences. The text is divided into five main sections covering select best practices in Measurement, Research Design, Basics of Data Analysis, Quantitative Methods, and Advanced Quantitative Methods. Each chapter contains a current and expansive review of the literature, a case for best practices in terms of method, outcomes, inferences, etc., and broad-ranging examples along with any empirical evidence to show why certain techniques are better. Key Features: Describes important implicit knowledge to readers: The chapters in this volume explain the important details of seemingly mundane aspects of quantitative research, making them accessible to readers and demonstrating why it is important to pay attention to these details. Compares and contrasts analytic techniques: The book examines instances where there are multiple options for doing things, and make recommendations as to what is the "best" choice—or choices, as what is best often depends on the circumstances. Offers new procedures to update and explicate traditional techniques: The featured scholars present and explain new options for data analysis, discussing the advantages and disadvantages of the new procedures in depth, describing how to perform them, and demonstrating their use. Intended Audience: Representing the vanguard of research methods for the 21st century, this book is an invaluable resource for graduate students and researchers who want a comprehensive, authoritative resource for practical and sound advice from leading experts in quantitative methods.

implications for social-personality psychology / Gerald L. Clore and Michael D. Robinson -- Cybernetic approaches to personality and social behavior / Colin G. DeYoung and Yanna J. Weisberg -- Initial impressions of others / James S. Uleman and S. Adil Saribay -- Attitudes and attitude change : social and personality considerations about specific and general patterns of behavior / Dolores Albarracin, Man-pui Sally Chan, and Duo Jiang -- From help-giving to helping relations : belongingness and independence in social interactions / Arie Nadler -- Antisocial behavior in individuals and groups : an empathy-focused approach / Emanuele Castano and David C. Kidd -- Personality and social interaction : interpenetrating processes / Rodolfo Mendoza-Denton, Jordan B. Leitner, and Ozlem Ayduk -- Attachment theory expanded : a behavioral systems approach to personality and social behavior / Mario Mikulincer and Phillip R. Shaver -- Person-by-situation perspectives on close relationships / Jeffry A. Simpson and Heike A. Winterheld -- Personality influences on group processes : the past, present, and future / Craig D. Parks -- Intergroup processes : from prejudice to positive relations between groups / Linda R.Tropp and Ludwin E. Molina -- Power as active self : from acquisition to the expression and use of power / Ana Guinote and Serena Chen -- Personality and social psychology in key life domains -- Personality, social psychology, and psychopathology : reflections on a lewinian vision / Philip R. Costanzo, Rick H. Hoyle, and Mark R. Leary -- Individual and societal well-being / Shigeiho Oishi and Samantha J. Heinzelman -- Multicultural identity and experiences : cultural, social, and personality processes / Verónica Benet-Martínez and Angela-MinhTu D. Nguyen -- Personality and social contexts as sources of change and continuity across the life span / Abigail J. Stewart and Kay Deaux -- The social psychology of personality and leadership : a person-in-situation perspective / Daan van Knippenberg -- Work and organizations: contextualizing personality and social psychology / Deidra J. Schleicher and David V. Day -- A person x intervention strategy approach to understanding health behavior / Alexander J. Rothman and Austin S. Baldwin -- Forensic personality and social psychology / Saul Kassin and Margaret Bull Kovera -- The psychology of collective action / Lauren E. Duncan -- Social policy: barriers and opportunities for personality and social psychology / Allen M. Omoto -- Conclusion -- Personality and social psychology : the evolving state of the union / Kay Deaux and Mark Snyder

Growth models are among the core methods for analyzing how and when people change. Discussing both structural equation and multilevel modeling approaches, this book leads readers step by step through applying each model to longitudinal data to answer particular research questions. It demonstrates cutting-edge ways to describe linear and nonlinear change patterns, examine within-person and between-person differences in change, study change in latent variables, identify leading and lagging indicators of change, evaluate co-occurring patterns of change across multiple variables, and more. User-friendly features include real data examples, code (for Mplus or NLMIXED in SAS, and OpenMx or nlme in R), discussion of the output, and interpretation of each model's results. User-Friendly Features *Real, worked-through longitudinal data examples serving as illustrations in each chapter. *Script boxes that provide code for fitting the models to example data and facilitate application to the reader's own data. **"Important Considerations" sections offering caveats, warnings, and recommendations for the use of specific models. *Companion website supplying datasets and syntax for the book's examples, along with additional code in SAS/R for linear mixed-effects modeling.

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An effective technique for data analysis in the social sciences. The recent explosion in longitudinal data in the social sciences highlights the need for this timely publication. Latent Curve Models: A Structural Equation Perspective provides an effective technique to analyze latent curve models (LCMs). This type of data features random intercepts and slopes that permit each case in a sample to have a different trajectory over time. Furthermore, researchers can include variables to predict the parameters governing these trajectories. The authors synthesize a vast amount of research and findings, at the same time, provide original results. The book analyzes LCMs from the perspective of structural equation models (SEMs) with latent variables. While the authors discuss simple regression-based procedures that are useful in the early stages of LCMs, most of the presentation uses SEMs as a driving tool. This cutting-edge work includes some of the authors’ recent work on the autoregressive latent trajectory model, suggests new models for method factors in multiple indicators, discusses repeated latent variable models, and establishes the identification of a variety of LCMs. This text has been thoroughly class-tested and makes extensive use of pedagogical tools to aid readers in mastering and applying LCMs quickly and easily to their own data sets. Key features include: Chapter introductions and summaries that provide a quick overview of highlights. Empirical examples provided throughout that allow readers to test their newly found knowledge and discover practical applications. Conclusions at the end of each chapter that stress the essential points that readers need to understand for advancement to more sophisticated topics. Extensive footnoting that points the way to the primary literature for more information on particular topics. With its emphasis on modeling and the use of numerous examples, this is an excellent book for graduate courses in latent trajectory models as well as a supplemental text for courses in structural modeling. This book is an excellent aid and reference for researchers in quantitative social and behavioral sciences who need to analyze longitudinal data.

Multilevel Modeling is a concise, practical guide to building models for multilevel and longitudinal data. Author Douglas A. Luke begins by providing a rationale for multilevel models; outlines the basic approach to estimating and evaluating a two-level model; discusses the major extensions to mixed-effects models; and provides advice for where to go for instruction in more
advanced techniques. Rich with examples, the Second Edition expands coverage of longitudinal methods, diagnostic procedures, models of counts (Poisson), power analysis, cross-classified models, and adds a new section added on presenting modeling results. A website for the book includes the data and the statistical code (both R and Stata) used for all of the presented analyses.

This open access book examines health trajectories and health transitions at different stages of the life course, including childhood, adulthood and later life. It provides findings that assess the role of biological and social transitions on health status over time. The essays examine a wide range of health issues, including the consequences of military service on body mass index, childhood obesity and cardiovascular health, socio-economic inequalities in preventive health care use, depression and anxiety during the child rearing period, health trajectories and transitions in people with cystic fibrosis and oral health over the life course. The book addresses theoretical, empirical and methodological issues as well as examines different national contexts, which help to identify factors of vulnerability and potential resources that support resilience available for specific groups and/or populations. Health reflects the ability of individuals to adapt to their social environment. This book analyzes health as a dynamic experience. It examines how different aspects of individual health unfold over time as a result of aging but also in relation to changing socioeconomic conditions. It also offers readers potential insights into public policies that affect the health status of a population.

This book provides a uniquely accessible introduction to multilevel modeling, a powerful tool for analyzing relationships between an individual-level dependent variable, such as student reading achievement, and individual-level and contextual explanatory factors, such as gender and neighborhood quality. Helping readers build on the statistical techniques they already know, Robert Bickel emphasizes the parallels with more familiar regression models, shows how to do multilevel modeling using SPSS, and demonstrates how to interpret the results. He discusses the strengths and limitations of multilevel analysis and explains specific circumstances in which it offers (or does not offer) methodological advantages over more traditional techniques. Over 300 dataset examples from research on educational achievement, income attainment, voting behavior, and other timely issues are presented in numbered procedural steps.

Rapid technological advances in devices used for data collection have led to the emergence of a new class of longitudinal data: intensive longitudinal data (ILD). Behavioral scientific studies now frequently utilize handheld computers, beepers, web interfaces, and other technological tools for collecting many more data points over time than previously possible. Other protocols, such as those used in fMRI and monitoring of public safety, also produce ILD, hence the statistical models in this volume are applicable to a range of data. The volume features state-of-the-art statistical modeling strategies developed by leading statisticians and methodologists working on ILD in conjunction with behavioral scientists. Chapters present applications from across the behavioral and health sciences, including coverage of substantive topics such as stress, smoking cessation, alcohol use, traffic patterns, educational performance and intimacy. Models for Intensive Longitudinal Data (MILD) is designed for those who want to learn about advanced statistical models for intensive longitudinal data and for those with an interest in selecting and applying a given model. The chapters highlight issues of general concern in modeling these kinds of data, such as a focus on regulatory systems, issues of curve registration, variable frequency and spacing of measurements, complex multivariate patterns of change, and multiple independent series. The extraordinary breadth of coverage makes this an indispensable reference for principal investigators designing new studies that will introduce ILD, applied statisticians working on related models, and methodologists, graduate students, and applied analysts working in a range of fields. A companion Web site at www.oup.com/us/MILD contains program examples and documentation.

"This book provides refreshing and powerful insights on the challenges of conducting
management research from a European perspective. Particularly for someone embarking on a management research career this book will provide valuable guidelines.' -- Ian MacMillan, Wharton School of Business, University of Pennsylvania "This comprehensive volume is distinguished by its balance and pragmatism. The authors who present the various research methods are not proponents but researchers who have applied these methods. The authors who discuss philosophical and strategic issues are not advocates but researchers who have had to confront these issues in their research' - Bill Starbuck, New York University "Doing Management Research is a fabulous contribution to our field. Thietart and his colleagues have put together a unique and valuable guide to help management scholars more deeply understand the issues, dynamics and contradictions of executing first class managerial research. This book will hold an important place on the researcher's desk for years to come' - Michael Tushman, Harvard Business School 'This is an excellent in-depth examination of the conduct of management research. It will serve as a valuable resource for management scholars and researchers and is a must read for Ph.D. students in management.' -- Michael Hitt, Arizona State University "This book will prove to be an excellent guide for those engaged in management research for the first time and an excellent refresher for more experienced scholars. Raymond Thietart and his colleagues should be thanked roundly for this comprehensive volume' - Gordon Walker, Southern Methodist University, Cox Business School "This textbook makes an outstanding contribution to texts on management research. For researchers considering management research it offers an extensive guide to the research process' - Paula Roberts, Nurse Researcher Doing Management Research, a major new textbook, provides answers to questions and problems which researchers invariably encounter when embarking on management research, be it quantitative or qualitative. This book will carefully guide the reader through the research process from beginning to end. An excellent tool for academics and students, it enables the reader to acquire and build upon empirical evidence, and to decide what tools to use to understand and describe what is being observed, and then, which methods of analysis to adopt. There is an entire section dedicated to writing up and communicating the research findings. Written in an accessible and easy-to-use style, this book can be read from cover to cover or dipped into, to clarify particular issues during the research process. Doing Management Research results from the 'hands-on' experience of a large group of researchers who have all had to address the different issues raised when undertaking management research. It is anchored in real methodological problems that researchers face in their work. This work will also become one of the most useful reference tools for senior researchers who are looking for answers to epistemological or methodological problems.

Featuring actual datasets as illustrative examples, this book reveals numerous ways to apply structural equation modeling (SEM) to any repeated-measures study. Initial chapters lay the groundwork for modeling a longitudinal change process, from measurement, design, and specification issues to model evaluation and interpretation. Covering both big-picture ideas and technical "how-to-do-it" details, the author deftly walks through when and how to use longitudinal confirmatory factor analysis, longitudinal panel models (including the multiple-group case), multilevel models, growth curve models, and complex factor models, as well as models for mediation and moderation. User-friendly features include equation boxes that clearly explain the elements in every equation, end-of-chapter glossaries, and annotated suggestions for further reading. The companion website (www.guilford.com/little-materials) provides datasets for all of the examples--which include studies of bullying, adolescent students' emotions, and healthy aging--with syntax and output from LISREL, Mplus, and R (lavaan).

Although standard mixed effects models are useful in a range of studies, other approaches must often be used in correlation with them when studying complex or incomplete data. Mixed Effects Models for Complex Data discusses commonly used mixed effects models and presents appropriate approaches to address dropouts, missing data, measurement errors, censoring, and outliers. For each class of mixed effects model, the author reviews the corresponding class of regression model for cross-sectional data. An overview of general models and methods, along with motivating examples After presenting real data examples and outlining general
approaches to the analysis of longitudinal/clustered data and incomplete data, the book introduces linear mixed effects (LME) models, generalized linear mixed models (GLMMs), nonlinear mixed effects (NLME) models, and semiparametric and nonparametric mixed effects models. It also includes general approaches for the analysis of complex data with missing values, measurement errors, censoring, and outliers. Self-contained coverage of specific topics Subsequent chapters delve more deeply into missing data problems, covariate measurement errors, and censored responses in mixed effects models. Focusing on incomplete data, the book also covers survival and frailty models, joint models of survival and longitudinal data, robust methods for mixed effects models, marginal generalized estimating equation (GEE) models for longitudinal or clustered data, and Bayesian methods for mixed effects models. Background material In the appendix, the author provides background information, such as likelihood theory, the Gibbs sampler, rejection and importance sampling methods, numerical integration methods, optimization methods, bootstrap, and matrix algebra. Failure to properly address missing data, measurement errors, and other issues in statistical analyses can lead to severely biased or misleading results. This book explores the biases that arise when naive methods are used and shows which approaches should be used to achieve accurate results in longitudinal data analysis.

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This volume reviews the challenges and alternative approaches to modeling how individuals change across time and provides methodologies and data analytic strategies for behavioral and social science researchers. This accessible guide provides concrete, clear examples of how contextual factors can be included in most research studies. Each chapter c

An introduction to foundations and applications for quantitatively oriented graduate social-science students and individual researchers.

Drawing on the authors' extensive research in the analysis of categorical longitudinal data, Latent Markov Models for Longitudinal Data focuses on the formulation of latent Markov models and the practical use of these models. Numerous examples illustrate how latent Markov models are used in economics, education, sociology, and other fields. The R and MATLAB® routines used for the examples are available on the authors’ website. The book provides you with the essential background on latent variable models, particularly the latent class model. It discusses how the Markov chain model and the latent class model represent a useful paradigm for latent Markov models. The authors illustrate the assumptions of the basic version of the latent Markov model and introduce maximum likelihood estimation through the Expectation-Maximization algorithm. They also cover constrained versions of the basic latent Markov model, describe the inclusion of the individual covariates, and address the random effects and multilevel extensions of the model. After covering advanced topics, the book concludes with a discussion on Bayesian inference as an alternative to maximum likelihood inference. As longitudinal data become increasingly relevant in many fields, researchers must rely on specific statistical and econometric models tailored to their application. A complete overview of latent Markov models, this book demonstrates how to use the models in three types of analysis: transition analysis with measurement errors, analyses that consider unobserved heterogeneity, and finding clusters of units and studying the transition between the clusters.

An in-depth guide to executing longitudinal confirmatory factor analysis (CFA) and structural equation modeling (SEM) in Mplus, this book uses latent state–trait (LST) theory as a unifying conceptual framework, including the relevant coefficients of consistency, occasion specificity, and reliability. Following a standard format, chapters review the theoretical underpinnings, strengths, and limitations of the various models; present data examples; and demonstrate each model's application and interpretation in Mplus, with numerous screen shots and output excerpts. Coverage encompasses both traditional models (autoregressive, change score, and growth curve models) and LST models for analyzing single- and multiple-indicator data. The
book discusses measurement equivalence testing, intensive longitudinal data modeling, and missing data handling, and provides strategies for model selection and reporting of results. User-friendly features include special-topic boxes, chapter summaries, and suggestions for further reading. The companion website features data sets, annotated syntax files, and output for all of the examples.

The aim of this encyclopedia is to provide a comprehensive reference work on scientific and other scholarly research on the quality of life, including health-related quality of life research or also called patient-reported outcomes research. Since the 1960s two overlapping but fairly distinct research communities and traditions have developed concerning ideas about the quality of life, individually and collectively, one with a fairly narrow focus on health-related issues and one with a quite broad focus. In many ways, the central issues of these fields have roots extending to the observations and speculations of ancient philosophers, creating a continuous exploration by diverse explorers in diverse historic and cultural circumstances over several centuries of the qualities of human existence. What we have not had so far is a single, multidimensional reference work connecting the most salient and important contributions to the relevant fields. Entries are organized alphabetically and cover basic concepts, relatively well established facts, lawlike and causal relations, theories, methods, standardized tests, biographic entries on significant figures, organizational profiles, indicators and indexes of qualities of individuals and of communities of diverse sizes, including rural areas, towns, cities, counties, provinces, states, regions, countries and groups of countries.

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