Introduction to meta-analysis borenstein pdf

Michael Borenstein, Director of Biostattical Programming AssociatesProfessor Borenstein is the co-author of the recently published book Wiley Publishing Bias in Post-Analysis, and has taught dozens of workshops on meta-analysis. It also helped develop the best-selling software programs for statistical power analysis. Hannah Rothstein, Zicklin School of Business, Baruch CollegeProfensor Rothstein regularly teaches seminars on meta-analysis and systematic reviews, and has 20 years of active research in the field of meta-analysis. He has authored several meta-analyses as well as articles on methodological issues in the field, and has made many presentations on the subject. Having contributed funds to two books on meta-analysis, he co-edited Publication Bias in Meta-Analysis. Larry Hedges, University of ChicagoA pioneer in meta-analysis, Professor Hedges has published over 80 papers in the area (many techniques he describes he developed, now used as a model), co-edited the manual on the synthesis of research, and co-authored three books on the subject, including seminal statistical methods for meta-analysis. He has also taught many short meta-analysis courses sponsored by various international organizations, such as the ASA. Julian Higgins, MRC Biostatistics Unit, CambridgeDr Higgins has published many methodological papers in meta-analysis. He works closely with the Cochrane Partnership and is the author of the Cochrane Handbook. He has extensive experience in teaching meta-analysis, both at the University of Cambridge and, by invitation, around the world. This book provides a clear and thorough introduction to meta-analysis, the process of data synthesis from a series of separate studies. Meta-analysis has become an extremely important tool in areas as

diverse as medicine, pharmacology, epidemiology, education, psychology, business and ecology. Introduction to Meta-Analysis: Describes the Role of Meta-Analysis in the Research Process Shows How to Calculate Effect Sizes and Treatment Results Explains Fixed Effect Models and Random Effects for Data Composition Shows How to Evaluate and Interpret Variation in Impact Size in All Studies Clarifies Concepts Using Text and Numbers, Followed by Formulas and Examples Explains How to Avoid Common Errors in Meta-Analysis Discusses Controversies in Meta-Analysis Features of a Web Page With additional material and exercises An excellent combination of clear and informative graphics, written by four of the world's leading experts on all aspects of meta-analysis. Borenstein, Hedges, Higgins, and Rothstein a refreshing departure from cookbook approaches with their clear explanations of what and why of post-analysis. The book is ideal as a coursebook or for self-study. My students, who used pre-publication versions of some of the chapters, are in a hurry for the clarity of Examples. David Rindskopf, Distinguished Professor of Educational Psychology, City University of New York, Graduate School and University Center, & Editor of the Journal of Educational and Behavioral Statistics. The approach taken by introduction to meta-analysis is intended to be primarily conceptual, and is surprisingly successful in achieving this goal. The reader can comfortably skip the formulas and still understand their application and underlying motivations. For the most statistically advanced reader, the relevant formulas and edited examples provide an excellent practical guide to performing a meta-analysis. The book provides an eclectic mix of examples from education, social sciences, biomedical studies, and even ecology. For anyone considering the leadership of a course in meta-analysis, or pursuing self-directed study, Introduction to Meta-analysis would be a clear first choice. Jesse A. Berlin, ScD Introduction to Post-Analysis is an excellent resource for beginners and experts alike. The book provides a clear and comprehensive presentation of all the key and most advanced approaches to meta-analysis. This book will be mentioned for decades. Michael A. McDaniel, Professor of Human Resources and Organizational Behavior, Commonwealth University of Virginia Both books can be recommended for postgraduate training and are useful additions to the library of those interested in the post-analytical accumulation of literature on training, vocational learning, and education in the professions. (Professions and Learning, 15 December 2010) Michael Borenstein, Director of Biostattical Programming AssociatesProfessor Borenstein is the co-author of the recently published book Wiley Publishing Bias in Post-Analysis, and has taught dozens of workshops on meta-analysis. It also helped develop the best-selling software programs for statistical power analysis. Hannah Rothstein, Zicklin School of Business, Baruch CollegeProfensor Rothstein regularly teaches seminars on meta-analysis and systematic reviews, and has 20 years of active research in the field of meta-analysis. He has authored several meta-analyses as well as articles on methodological issues in the field, and has made many presentations on the subject. Having contributed funds to two books on meta-analysis, he co-edited Publication Bias in Meta-Analysis. 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Academia.edu uses cookies to personalize content, customize ads, and improve the user experience. By using our website, you agree to our collection of information through the use of cookies. To learn more, see our Privacy Policy.× Order Online This book provides a clear and thorough introduction to the meta-analysis, data synthesis process from a series of separate studies. Meta-analysis has become an extremely important tool in areas as diverse as medicine, pharmacology, epidemiology, education, psychology, business and ecology. Introduction to Meta-Analysis: Describes the Role of Meta-Analysis in the Research Process Shows How to Calculate Effect Sizes and Treatment Results Explains Fixed Effect Models and Random Effects for Data Composition Shows How to Evaluate and Interpret Variation in Impact Size in All Studies Clarifies Concepts Using Text and Numbers, Followed by Formulas and Examples Explains How to Avoid Common Errors in Meta-Analysis Discusses Controversies in Meta-Analysis Features of a Web Page With additional material and exercises A wonderful lucid combination of prose and informative graphics, written by four of the world's leading experts on all aspects of meta-analysis. Borenstein, Hedges, Higgins, and Rothstein provide a refreshing departure from cookbook approaches with their clear explanations of the what and why of post-analysis. The book is ideal as a coursebook or for self-study. 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For anyone thinking of leading a course in meta-analysis, or pursuing self-directed study, Introduction to Meta-analysis would be a clear first option. Jesse A. Berlin, Berlin, Introduction to Meta-Analysis is an excellent source for beginners and experts alike. The book provides a clear and comprehensive presentation of all the key and most advanced approaches to meta-analysis. This book will be mentioned for decades. Michael A. McDaniel, Professor of Human Resources and Organizational Behavior, Virginia Commonwealth University List of Numbers List of Identification Tables Foreword Part 1: INTRODUCTION 1 HOW A TRANSFER-ANALYSIS WORKS Introduction Individual Studies The Summary Effect Heterogeneity of Effect Sizes Summary Points 2 WHY YOU ARE EXECUTING A TRANSFER-ANALYSIS Introduction The meta-analysis SKIV Statistical significance Clinical significance Of effect Consistency of results Summary points 2 : SIZE OF IMPACT AND THE PROVISION 3 OVERVIEW RESULTS AND effects sizes Parameters and estimates Outline 4 SIZE OF INVESTMENT BASED MEDIA Introduction Raw (non-standard) mean difference D Standard average difference, D and G Response Ratios Summary Points 5 EFFECTS SIZES BASED ON BINARY DATA (2×2 TABLES) Introduction Risk Ratio Risk Difference Choice Effect Size Index Summary Points 6 SIZE EFFECTS BASED ON CONTRACTS Introduction Computational R Other Approaches Summary Points 7 CONVERSION Conversion from Log Yield Ratio to D Conversion to Log Rate Conversion from R to D Conversion from D in R Summary Points 8 CONTENTS AFFECTING SOURCE Importers Factors affecting accuracy Sample size Study points 9 CONCLUSIONAL COMMENTS Further reading PART 3: STATUS PROPOSALS AGAINST SERVICES 10 OVERVIEW Introduction Nomenclature 11 MODEL OF STATUS RESULTS Introduction The actual size effect Impact of sampling error Perform a post-analysis of a fixed result Summary points 12 MODEL OF TYPE-RESULTS Introduction The actual impact sizes Impact of the sampling error Execution of a meta-analysis of random results Summary points 13 STATUS PROVISIONS AGAINST SERVICES-RESULTS MODEL Introduction Definition of a summary effect Assessment of the summary effect Extreme effect size in the large study Confidence interval The zero hypothesis What model should we use? 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Concluding Remarks Summary points PART 10: RESOURCES AND ACCOUNT 44 SOFTWARE Introduction Three examples of meta-analysis software The Software Integrated Meta-Analysis (CMA) 2.0 Revman 5.0 Statam Macros with Stata 10.0 Summary Points 45 BOOKS, SITE AND REGULATORY ORGANIZATIONS Books for Systematic Review Methods Books on Index Index Index Index