Abstract

Meta-analysis is the statistical analysis of research findings, and meta-analytic techniques are widely used in public health, medicine, the social sciences and educational research. Typically these methods are employed to combine the results of individual studies to provide a summary result of the research in an area, but other uses include exploratory analyses to identify study-level factors that affect outcomes. The session will summarize the theory and use of the most common meta-analytic methods, the interpretation and limitations of results from these methods, diagnostic procedures, and some advanced topics with a focus on applications. Meta-analytic results are sometimes controversial, and we will discuss these controversies as well.

Michael LaValley, PhD. is a Professor of Biostatistics at the Boston University School of Public Health, where he teaches courses on meta-analysis, logistic regression and survival analysis. He has been an author on 25 meta-analyses or articles on meta-analysis and has taught a yearly course on meta-analysis and systematic review at Boston University since 2004.

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