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the data; 2.2.2 Why conduct LCA on the pubertal development data?; 2.2.3 Latent classes in the pubertal development data 2.3 The role of item-response probabilities in interpreting latent classes 2.3.1 A hypothetical example; 2.3.2 Interpreting the item-response probabilities to label the latent classes in the pubertal development example; 2.3.3 Qualitative and quantitative differences among the pubertal development latent classes; 2.4 Empirical example: Health risk behaviors; 2.4.1 An initial look at the data; 2.4.2 LCA of the health risk behavior data; 2.5 LCA: Model and notation; 2.5.1 Fundamental expressions; 2.5.2 The local independence assumption; 2.6 Suggested supplemental readings; 2.7 Points to remember 2.8 What's next 3 The relation between the latent variable and its indicators; 3.1 Overview; 3.2 The latent class measurement model; 3.2.1 Parallels with factor analysis; 3.2.2 Two criteria for evaluating item-response probabilities for a single variable; 3.2.3 Hypothetical and empirical examples of independence and weak relations; 3.2.4 Hypothetical and empirical examples of strong relations; 3.3 Homogeneity and latent class separation; 3.3.1 Homogeneity; 3.3.2 Latent class separation; 3.3.3 Hypothetical examples of homogeneity and latent class separation 3.3.4 How homogeneity and latent class separation are related 3.3.5 Homogeneity, latent class separation, and the number of response patterns observed; 3.3.6 Homogeneity and latent class separation in empirical examples; 3.4 The precision with which the observed variables measure the latent variable; 3.4.1 Why posterior probabilities of latent class membership are of interest; 3.4.2 Bayes' theorem; 3.4.3 What homogeneity and latent class separation imply about posterior probabilities and classification uncertainty 3.4.4 Posterior classification uncertainty even with a high degree of homogeneity and latent class separation

Sommario/riassunto

A modern, comprehensive treatment of latent class and latent transition analysis for categorical data On a daily basis, researchers in the social, behavioral, and health sciences collect information and fit statistical models to the gathered empirical data with the goal of making significant advances in these fields. In many cases, it can be useful to identify latent, or unobserved, subgroups in a population, where individuals' subgroup membership is inferred from their responses on a set of observed variables. Latent Class and Latent Transition Analysis provides a comprehensiv
