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Title: A Comparison of Two Stochastic Mixture Models of Choice

This talk will contrast two approaches to analyzing mixture models of behavioral properties of preferential choice. One approach fits binary choice proportions with the assumption that responses by the same person to repeated presentations of the same choices are independent. The assumption in this approach is that a person samples different preference patterns randomly from a mixture set on each trial. A rival approach, in contrast, fits frequencies of response combinations with the assumption that a given person has a fixed set of true preferences in a given block of trials that may be perturbed by independent errors. Independence of repeated choices holds in this model, however, only when there is a single set of true preferences in the mixture. Data from individuals testing transitivity of preference will be presented to evaluate the empirical descriptive accuracy of the two rival models.