Discriminant analysis of multivariate repeated measures data with a Kronecker product structured covariances matrices

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Abstract

Consider a set of T repeated measurements on p variables on each of the $n \ (= n_1 + \ldots + n_K)$ individuals forming K populations. Thus, data on each individual is a $p \times T$ matrix. The problem of classifying multiple-response repeated measurements arises in many areas, such as medicine, psychology and education.

This article proposes new classification rules under the assumption of multivariate normality for populations with a Kronecker product structured covariance matrices