

# **Selezione delle variabili nell'analisi discriminante quadratica tra due gruppi (\*)**

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## **Summary**

The purpose of the present study is to examine the problem of the selection of variables in a two-group quadratic discriminant analysis. We are particularly interested in the conditional deletion method that will be based on three different solutions of the multivariate Behrens-Fisher problem: James's test, Yao's test and Bennett's test. On the basis of different sets of real and simulated data we find that a ranking procedure, when the covariances matrices are unequal and the sample sizes are both unequal and small, should be based on the James's Test. However, The Hotelling's  $T^2$  test, currently used for testing equality of means when covariances matrices are equal, is a valuable alternative to the James's Test.

## *Keywords:*

*problema Behrens-Fisher, analisi discriminante, riduzione della dimensionalità*

(\*) Lavoro comparso nei *Quaderni di Statistica e Econometria*. Vol. X, 1990, 115-131