

A new look at combining information from stratum submodels

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Abstract

The main principles improving the objectivity of inference from planned experiments consist on blocking the experimental units, randomizing processes, and replications of treatments on which the interest of the experimenter is focused. These principles determine a model of observations resulting from the experiment. The model with fixed effects of treatments and with random effects of various levels of blocking is classified as a mixed model. This paper deals with the issue of combining information on treatment comparisons following from several submodels induced by the randomizations involved. The approach proposed here is quite general and mainly geometrical, which simplifies the considerations.

Keywords

orthogonal block structure, variance components estimation.

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