Estimability and connectivity in m-way designs

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Abstract

The classical problem of ascertaining the connectivity status of an m-way design has received much attention, particularly in the cases where m = 2 and m = 3. In the general case, a new approach yields the connectivity status for the overall design and for each of the individual factors directly from the kernel space of the design matrix. Furthermore, the set of estimable parametric functions in each factor is derived from a segregated component of this kernel space.

The kernel space approach enables a simple derivation of some classical results. Examples are given to illustrate the main results.

Keywords

Connectivity, Contrast, Estimability, Kernel.

References

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