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Optimal two-level conjoint designs with constant attributes in the profile sets. (English)

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Summary: We propose a simple strategy to construct D-, A-, G- and V-optimal two-level designs for rating-based conjoint studies with large numbers of attributes. In order to simplify the rating task, the designs hold one or more attributes at a constant level in each profile set. Our approach combines orthogonal designs and binary incomplete block designs with equal replication. The designs are variance-balanced meaning that they yield an equal amount of information on each of the part-worths.

MSC:

62K05 Optimal statistical designs

62K10 Statistical block designs

Cited in 2 Documents

Keywords:

two-level conjoint design; D-, A-, G- and V-optimality; comparison depth; orthogonal designs; binary incomplete block designs; balanced and partially balanced incomplete block designs

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