

Nonparametric tests for ordering in mixed block designs

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Various tests are presented to test for either the nondecreasing ordered alternative or the umbrella alternative for mixtures of complete block and balanced incomplete block sampling designs. A simulation study is conducted to compare the proposed tests under a variety of situations. Situations are considered when there are more complete blocks than incomplete blocks, more incomplete blocks than complete blocks, and when there are an equal number of complete and incomplete blocks. Underlying distributions considered include the normal distribution, the exponential distribution and the t-distribution with 3 degrees of freedom. Three, four, and five populations are considered. Recommendations are given.

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