Confidence intervals for linear function of mean vectors in the intraclass correlation model with missing data

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Abstract

In this paper, we consider the test for the equality of mean vectors in the intraclass correlation model with monotone missing data. Dunn (1961) proposed the conservative method based on Bonferroni inequality. Holland and Copenhaver (1987) considered improved Dunn's method by using Sidák inequality. We derive Bonferroni type of simultaneous confidence intervals for linear contrasts based on Bonferroni's inequality. Also we improve Bonferroni type of simultaneous confidence intervals.

Keywords

Intraclass correlation model, Monotone missing data, Simultaneous confidence intervals for linear contrasts, Bonferroni inequality, Sidák inequality.

References

Dunn, O.J. (1961). Multiple comparisons among means. J. Amer. Statist. Assoc. 56, 52–64.

Holland, B.S. and Copenhaver, M.D. (1987). An improved sequentially rejective Bonferroni test procedure. *Biometrics* 43, 417–423.