

Martín-Fernández, Josep-Antoni; Daunis-i-Estadella, Josep; Mateu-Figueras, Glòria
On the interpretation of differences between groups for compositional data. (English)

Zbl 1396.62171

SORT 39, No. 2, 231-252 (2015).

Summary: Social polices are designed using information collected in surveys; such as the Catalan Time Use survey. Accurate comparisons of time use data among population groups are commonly analysed using statistical methods. The total daily time expended on different activities by a single person is equal to 24 hours. Because this type of data are compositional, its sample space has particular properties that statistical methods should respect. The critical points required to interpret differences between groups are provided and described in terms of log-ratio methods. These techniques facilitate the interpretation of the relative differences detected in multivariate and univariate analysis.

MSC:

[62J10](#) Analysis of variance and covariance (ANOVA)

[62P25](#) Applications of statistics to social sciences

Cited in **2** Documents

Keywords:

log-ratio transformations; MANOVA; perturbation; simplex; subcomposition

Software:

dobson; fda (R); gss; R

Full Text: [Link](#)