Parameter inestimability in hierarchical loglinear models for sparse contingency tables

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Abstract

Parameter inestimability in hierarchical loglinear models for sparse complete multidimensional contingency tables where there are margins containing zeros has been discussed in [2]. There is also the possibility of parameter inestimability without any marginal zeros - the simplest case is the 2x2x2 table with zeros in the (1,1,1) and (2,2,2) cells discussed in [1]. This presentation will explore how the problem of inestimable parameters even without marginal zeros generalises to tables with more than two categories per variable, or greater than three dimensions.

Keywords

Estimability, internal zeros, hierarchical models, loglinear models, marginal zeros, seed zeros, sparse contingency tables

References

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