Influential observations in the extended Growth Curve model with cross-over designs

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Abstract

Growth Curve model (GCM) and extended GCM are useful tools to model repeated measurements in cross-over designs. [2] and [3] assessed influence of observations on estimating the GCM with unstructured covariance. This work is to propose quantities to detect influential measurements in the extended GCM. It is known that various residuals in the extended GCM can be defined by projecting data matrix onto four orthogonal spaces, see [1]. The relations between the influence quantities and the residuals are surveyed.

Keywords

Extended Growth Curve model, Influence analysis, Repeated measurement design, Statistical diagnostics.

References

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