$$LD(\boldsymbol{\omega} = 2[Lth\hat{e}ta - th\hat{e}ta_{\boldsymbol{\omega}}$$

Large values indicate that $th\hat{e}ta$ and $th\hat{e}ta_{\boldsymbol{\omega}}$ differ considerably.

0.1 Likelihood Distance

The likelihood distance gives the amount by which the log-likelihood of the full data changes if one were to evaluate it at the reduced-data estimates. The important point is that $l(\psi_{(U)})$ is not the log-likelihood obtained by fitting the model to the reduced data set.

It is obtained by evaluating the likelihood function based on the full data set (containing all n observations) at the reduced-data estimates.

The likelihood distance is a global, summary measure, expressing the joint influence of the observations in the set U on all parameters in ψ that were subject to updating.

0.1.1 Likelihood Distance

The likelihood distance is a global, summary measure, expressing the joint influence of the observations in the set U on all parameters in ϕ that were subject to updating.

0.1.2 Restricted Likelihood Distances