

A Replication Study

Bayesian Inference for Agreement Measures

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Goals of this Research

Replicate the results of:

- ▶ Bayesian Inference for Agreement Measures.
 - ▶ By: Ignacio Vidal and Mário de Castro.
 - ▶ Journal of biopharmaceutical statistics, 2016 p. 809-823.

The main ideas behind the paper:

Methods for assessing agreement between a set of paired observations has been well studied in the literature. Most of the studies have focused on using a frequentist approach to calculate several measure of measurement agreement.

Assessing agreement between measurements:

- ▶ A way to assess agreement between two random variables X and Y is the mean squared deviation (MSD).
- ▶ Another measure of agreement between two random variables is the Concordance Correlation Coefficient (CCC).

The Model

Likelihood

Prior

Posterior