

# Bayesian Hierarchical Models for Recognition-Memory and Other Psychological Experiments

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## **Abstract**

We review recent development of Bayesian hierarchical models for three from psychological research: response times, process dissociation process, and signal detection. The issues include existence of MLE and the choice of priors for Bayesian hierarchical models. We illustrate that Bayesian analysis can be successful in solving practical problems where the likelihood function does not perform well. Choice of priors is often crucial. One at least should study the robustness of a prior. If possible, objective priors could be used, at least for comparing purpose.