



## Cognitive Models in Intelligence Research

Guest Editor:

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### Message from the Guest Editor

How are parameters of cognitive models related to mental abilities? Is there a hierarchical structure of model parameters reflecting both general- and domain- or content-specific abilities? Can cognitive models provide a link between neural data and intelligence test scores in terms of mediating cognitive processes as suggested by proponents of model-based cognitive neuroscience? How can the psychometric properties of model parameters be evaluated and improved? Are there best practices and practical recommendations for the application of cognitive models in individual differences research? This Special Issue invites contributions addressing conceptual or empirical questions regarding cognitive models in intelligence research.

Keywords:

- cognitive models
- mathematical models
- diffusion model
- item-response theory
- factor structure
- mental speed
- working memory
- model-based cognitive neuroscience

