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**A computational cognitive modeling approach to
the development of second-order theory of mind**

Burcu Arslan

1. Five-year-olds make systematic errors in second-order false belief tasks, which are due to using a first-order theory of mind strategy. – *Chapter 2*
2. Children explicitly revise their wrong first-order theory of mind strategy to a correct second-order strategy. – *Chapter 2*
3. It is possible to accelerate children's development of second-order false belief reasoning with the feedback "Wrong" without any need to explain the reasons why their answers are wrong. – *Chapters 2 & 3*
4. Children's failures in second-order false belief reasoning are caused by their lack of experience rather than the need for a conceptual change which refers to understanding that beliefs can be used recursively. – *Chapter 3*
5. Although second-order syntactic recursion is significantly correlated with second-order false belief reasoning, the main predictor of second-order false belief reasoning is complex working memory. – *Chapter 4*
6. The *serial processing bottleneck* hypothesis provides a procedural account for the role of complex working memory strategies in the development of second-order false belief reasoning. – *Chapter 4*
7. Our cognitive models predict that training three-year-olds with complex working memory tasks accelerates their development of first-order theory of mind and this prediction needs to be tested empirically. – *Chapter 5*
8. The key factor for the transfer from the Dimensional Change Card Sorting task to the first-order false belief task and vice versa is training for the use of the *strategy of control* with the help of explicit feedback with further explanations instead of a simpler reactive strategy. – *Chapter 6*
9. Constructing cognitive models to predict the effect of different feedback methods and what kind of skills might be transferred to another domain (far transfer) is an effective way of designing an appropriate training study and a valuable tool to interpret the empirical results. – *Chapters 2 & 3 & 5 & 6*
10. "What I cannot create, I do not understand." (Feynman, 1988)