**Tables**

|  |  |  |
| --- | --- | --- |
| Condition | First learning phase | Second learning phase |
| Backwards blocking (experimental) | ABC+ | A+ |
| Backwards blocking (control) | ABC+ | D+ |
| Indirect screening-off (experimental) | ABC+ | A- |
| Indirect screening-off (control) | ABC+ | D- |

Table 1. Schematic of the task structure for the backwards blocking and indirect screening-off experimental and control trials.

|  |  |  |
| --- | --- | --- |
| Condition | First learning phase | Second learning phase |
| Backwards blocking (experimental) | ABC+ | AB+ |
| Backwards blocking (control) | ABC+ | DE+ |
| Indirect screening-off (experimental) | ABC+ | AB- |
| Indirect screening-off (control) | ABC+ | DE- |

Table 2. Schematic of the task structure for the backwards blocking and indirect screening-off experimental and control trials.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (A) Model fit to the data overall | | | | | | | |
| Experiment 1 | | | | Experiment 2 | | | |
| Connectionist‡ | | Bayesian Model | | Connectionist‡ | | Bayesian Model | |
| RMSE | MAE | RMSE | MAE | RMSE | MAE | RMSE | MAE |
| .15 | .11 | .17 | .17 | .13 | .11 | .16 | .13 |
|  |  |  |  |  |  |  |  |
| (B) Model fit to the backwards blocking data only | | | | | | | |
| Experiment 1 | | | | Experiment 2 | | | |
| Connectionist‡ | | Bayesian Model | | Connectionist‡ | | Bayesian Model | |
| RMSE | MAE | RMSE | MAE | RMSE | MAE | RMSE | MAE |
| .19 | .16 | .20 | .18 | .13 | .11 | .15 | .14 |
|  |  |  |  |  |  |  |  |
| (C) Model fit to the indirect screening-off data only | | | | | | | |
| Experiment 1 | | | | Experiment 2 | | | |
| Connectionist‡ | | Bayesian Model | | Connectionist | | Bayesian Model‡ | |
| RMSE | MAE | RMSE | MAE | RMSE | MAE | RMSE | MAE |
| .08 | .07 | .18 | .16 | .11 | .11 | .12 | .03 |
|  |  |  |  |  |  |  |  |
| (D) Model fit to the experimental trials only | | | | | | | |
| Experiment 1 | | | | Experiment 2 | | | |
| Connectionist | | Bayesian Model | | Connectionist | | Bayesian Model‡ | |
| RMSE | MAE | RMSE | MAE | RMSE | MAE | RMSE | MAE |
| .19 | .16 | .19 | .16 | .16 | .14 | .14 | .12 |
|  |  |  |  |  |  |  |  |
| (E) Model fit to the control trials only | | | | | | | |
| Experiment 1 | | | | Experiment 2 | | | |
| Connectionist‡ | | Bayesian Model | | Connectionist‡ | | Bayesian Model | |
| RMSE | MAE | RMSE | MAE | RMSE | MAE | RMSE | MAE |
| .10 | .08 | .20 | .17 | .11 | .09 | .17 | .17 |

Table 3. Model fit indices for the various models and instantiations for the data overall and the data for the backwards blocking, indirect screening-off, experimental, and control trials in Experiments 1 and 2 data. ‡ Corresponds to the better fitting overall model based on average RMSE and MAE.