Supplemental Table 4. Parameter estimates from latent change score models with dynamic couplings between IADL difficulty and memory performance: Results from ACTIVE (N=2,802)

|  |  |  |  |
| --- | --- | --- | --- |
|   | Memory performance (Higher is better) | Reasoning performance (Higher is better) | Speed of processing performance (Higher is worse) |
|   | Estimate (SE) | Estimate (SE) | Estimate (SE) |
| Latent variable means |   |   |   |
| Mean cognition | -0.04 (0.02) | -0.03 (0.02) | 0.00 (0.02) |
| Slope of change in cognition | 0.02\* (0.00) | 0.02\* (0.00) | 0.02\* (0.00) |
| Mean IADL (higher is worse) | 0.01\* (0.02) | 0.01\* (0.02) | 0.02\* (0.02) |
| Slope of change in IADL | 0.02\* (0.01) | 0.02\* (0.01) | 0.02\* (0.01) |
| Coupling |   |   |   |
| IADL → change cognition | -0.07\* (0.04) | 0.01\* (0.04) | -0.23\* (0.10) |
| Model fit |   |   |   |
| RMSEA | 0.047 | 0.075 | 0.060 |
| CFI | 0.965 | 0.937 | 0.910 |

Parameters for latent variable means are in standardized N(0,1) units, per baseline standard deviation units. The row of parameter coefficients for couplings represent the annual rate of change in cognitive functioning at time t + 1, in standardized N(0,1) units, per baseline standard deviation unit level of IADL difficulty at time t.

\* p<0.05, compared to 0 effect

+ p<0.05, compared to the control group