

## Supplement A: Transfer effects

**Table A1** Performance on the digit span task of the WISC and the RSPM

|                               | Main effect                              | (Interaction with) Time                  |
|-------------------------------|--|--|
| <b>Digit span<sup>a</sup></b> |  |  |
| Main effect                   |  | $F(1,16) = 6.25, p = .02, \eta^2 = .28$  |
| Condition                     | $F(1,16) = 90.7, p < .001, \eta^2 = .85$ | $F(1,16) = 0.80, p = .39, \eta^2 = .05$  |
| Group                         | $F(1,16) = 4.18, p = .06, \eta^2 = .21$  | $F(1,16) = 0.05, p = .82, \eta^2 = .003$ |
| Condition × Group             | $F(1,16) = 2.15, p = .16, \eta^2 = .12$  | $F(1,16) = 0.47, p = .50, \eta^2 = .03$  |
| <b>RSPM</b>                   |  |  |
| Main effect                   |  | $F(1,16) = 0.22, p = .65, \eta^2 = .01$  |
| Group                         | $F(1,16) = 0.16, p = .70, \eta^2 = .01$  | $F(1,16) = 0.13, p = .72, \eta^2 = .01$  |

<sup>a</sup> Before practice, there were no performance differences between groups: both  $ps \geq .09$

**Table A2** Performance on the five executive function transfer tasks that were administered after practice

|                                    | Main effect                               | (Interaction with) Group                 |
|------------------------------------|---|--|
| <b>Spatial working memory task</b> |   |  |
| Main effect (accuracy)             |   | $F(1,16) = 1.47, p = .24, \eta^2 = .08$  |
| Condition (accuracy)               | $F(1,16) = 9.68, p = .007, \eta^2 = .38$  | $F(1,16) = 1.78, p = .20, \eta^2 = .10$  |
| Main effect (reaction times)       |   | $F(1,16) = 0.78, p = .39, \eta^2 = .05$  |
| Condition (reaction times)         | $F(1,16) = 1.34, p = .26, \eta^2 = .08$   | $F(1,16) = 0.90, p = .36, \eta^2 = .05$  |
| <b>Local Global task</b>           |   |  |
| Main effect                        |   | $F(1,16) = 0.58, p = .46, \eta^2 = .04$  |
| Congruency                         | $F(1,16) = 24.01, p < .001, \eta^2 = .60$ | $F(1,16) = 1.00, p = .33, \eta^2 = .06$  |
| Switch                             | $F(1,16) = 16.03, p = .001, \eta^2 = .50$ | $F(1,16) = 0.02, p = .88, \eta^2 = .001$ |
| Congruency × Switch                | $F(1,16) = 7.62, p = .01, \eta^2 = .32$   | $F(1,16) = 0.04, p = .84, \eta^2 = .003$ |
| <b>Mental Counters<sup>a</sup></b> |   |  |
| Main effect                        |   | $F(1,15) = 6.55, p = .02, \eta^2 = .30$  |
| Series                             | $F(1,15) = 0.25, p = .63, \eta^2 = .02$   | $F(1,15) = 0.08, p = .78, \eta^2 = .01$  |
| Counters                           | $F(1,15) = 0.08, p = .78, \eta^2 = .01$   | $F(1,15) = 0.08, p = .78, \eta^2 = .01$  |
| Series × Counters                  | $F(1,15) = 0.46, p = .51, \eta^2 = .03$   | $F(1,15) = 0.26, p = .62, \eta^2 = .02$  |
| <b>Tower of London</b>             |   |  |
| Perfect solutions                  |   | $F(1,16) = 0.01, p = .94, \eta^2 < .001$ |
| Extra moves                        |   | $F(1,16) = 1.80, p = .20, \eta^2 = .10$  |
| Planning time                      |   | $F(1,16) = 4.26, p = .06, \eta^2 = .21$  |
| <b>WCST</b>                        |   |  |
| Categories achieved                |   | $F(1,16) = 3.33, p = .09, \eta^2 = .17$  |
| Perseverative errors               |   | $F(1,16) = 0.22, p = .64, \eta^2 = .01$  |
| Conceptual level responses         |   | $F(1,16) = 0.84, p = .37, \eta^2 = .05$  |

<sup>a</sup> For this task, data from one participant (practice group) were missing due to a technical problem