**Table S2** Fixed and random effects for the linear mixed models – secondary outcomes

|  |
| --- |
| **Random Effects** |
| **Level** | **Parameter estimate** | ***SE*** | ***P*** | **95% Confidence intervals** |
|  |  |  |  | *Lower* | *Upper* |
| **Nonverbal intelligence – TONI-4*a*** |  |  |
| AR1 diagonal | 74.30 | 16.78 | < 0.0005 | 40.60 | 108.00 |
| AR1 rho | −0.05 | 0.22 | 0.820 | −0.50 | 0.40 |
| Intercept | 58.26 | 20.02 | 0.004 | 18.58 | 97.94 |
| **Planning – KABC-II: Rover*b*** |  |  |
| AR1 diagonal | 4.62 | 2.06 | 0.029 | 0.50 | 8.74 |
| AR1 rho | 0.30 | 0.28 | 0.284 | −0.26 | 0.85 |
| Intercept | 1.97 | 2.08 | 0.348 | −2.19 | 6.13 |
| **Verbal working memory – KABC-II: Number Recall, Word Order*b*** |  |  |
| AR1 diagonal | 2.76 | 1.37 | 0.047 | 0.04 | 5.48 |
| AR1 rho | 0.27 | 0.30 | 0.367 | −0.34 | 0.88 |
| Intercept | 2.23 | 1.51 | 0.143 | −0.77 | 5.24 |
| **Verbal memory – KABC-II: Atlantis; Atlantis recall*b*** |  |  |
| AR1 diagonal | 4.28 | 2.27 | 0.061 | −0.20 | 8.76 |
| AR1 rho | 0.37 | 0.29 | 0.212 | −0.21 | 0.95 |
| Intercept | 2.89 | 2.40 | 0.229 | −1.83 | 7.61 |
| **Selective attention – WISC-IV: Cancellation*b,﻿e*** |  |
| AR1 diagonal | 10.54 | 1.33 | < 0.0005 | 7.93 | 13.15 |
| AR1 rho | 0.59 | 0.08 | < 0.0005 | 0.43 | 0.74 |
| **Processing speed – WISC-IV: Coding; Symbol Search*b,e*** |  |  |
| AR1 diagonal | 7.19 | 0.99 | < 0.0005 | 5.24 | 9.13 |
| AR1 rho | 0.73 | 0.06 | < 0.0005 | 0.62 | 0.85 |
| **Parent rating of behavioral regulation – BRIEF: Inhibition, Shifting, Emotional Controld** |
| AR1 diagonal | 25.78 | 9.22 | 0.01 | 7.32 | 44.24 |
| AR1 rho | 0.18 | 0.26 | 0.49 | -0.34 | 0.70 |
| Intercept | 67.79 | 15.69 | < 0.0005 | 36.99 | 98.59 |
| **Parent rating of working memory – BRIEF: Working Memoryd** |
| AR1 diagonal | 64.53 | 45.72 | 0.16 | -26.98 | 156.03 |
| AR1 rho | 0.22 | 0.33 | 0.50 | -0.45 | 0.90 |
| Intercept | 106.85 | 48.75 | 0.03 | 10.16 | 203.54 |
| **Motor abilities – DMT 6-18c** |  |  |
| AR1 diagonal | 25.08 | 9.61 | 0.011 | 5.90 | 44.25 |
| AR1 rho | 0.20 | 0.26 | 0.434 | −0.31 | 0.72 |
| Intercept | 29.47 | 11.01 | 0.008 | 7.73 | 51.21 |
| **Fixed Effects** |
| **Effects** | **Parameter Estimate** | ***SE*** | ***t* ratio** | ***p*** | **95% Confidence intervals** |
|  |  |  |  |  | *Lower* | *Upper* |
| **Nonverbal intelligence – TONI-4*a*** |  |  |  |
| Intercept | 106.19 | 1.37 | 77.53 | < 0.0005 | 103.50 | 108.87 |
| Months | 0.52 | 0.60 | 0.86 | 0.388 | −0.66 | 1.70 |
| Cogmed × months | 1.40 | 0.80 | 1.75 | 0.080 | −0.17 | 2.98 |
| Exergaming × months | 0.90 | 0.82 | 1.09 | 0.274 | −0.71 | 2.51 |
| Control × months | 0.00 | . | . | . | . | . |
| **Planning – KABC-II: Rover*b*** |  |
| Intercept | 12.21 | 0.31 | 39.02 | < 0.0005 | 11.59 | 12.82 |
| Months | 0.45 | 0.13 | 3.38 | 0.001 | 0.19 | 0.72 |
| Cogmed × months | −0.04 | 0.18 | −0.26 | 0.798 | −0.39 | 0.30 |
| Exergaming × months | −0.02 | 0.17 | −0.12 | 0.904 | −0.36 | 0.32 |
| Control × months | 0.00 | – | – | – | – | – |
| **Verbal working memory – KABC-II: Number Recall; Word Order*b*** |  |
| Intercept | 9.39 | 0.27 | 35.07 | < 0.0005 | 8.87 | 9.92 |
| Months | 0.09 | 0.11 | 0.88 | 0.382 | −0.11 | 0.30 |
| Cogmed × months | 0.06 | 0.15 | 0.38 | 0.707 | −0.24 | 0.35 |
| Exergaming × months | 0.17 | 0.14 | 1.23 | 0.218 | −0.10 | 0.45 |
| Control × months | 0.00 | – | – | – | – | – |
| **Verbal memory – KABC-II: Atlantis; Atlantis recall*b*** |  |  |  |
| Intercept | 11.76 | 0.32 | 36.84 | < 0.0005 | 11.13 | 12.38 |
| Months | 0.16 | 0.13 | 1.30 | 0.195 | −0.08 | 0.41 |
| Cogmed × months | 0.15 | 0.17 | 0.92 | 0.358 | −0.17 | 0.48 |
| Exergaming × months | 0.27 | 0.17 | 1.57 | 0.116 | −0.07 | 0.61 |
| Control × months | 0.00 | – | – | – | – | – |
| **Selective attention – WISC-IV: Cancellation*b*** |
| Intercept | 10.26 | 0.38 | 27.11 | < 0.0005 | 9.52 | 11.00 |
| Months | 0.29 | 0.17 | 1.75 | 0.080 | −0.04 | 0.62 |
| Cogmed × months | −0.04 | 0.24 | −0.16 | 0.877 | −0.51 | 0.43 |
| Exergaming × months | −0.02 | 0.23 | −0.07 | 0.948 | −0.47 | 0.44 |
| Control × months | 0.00 | – | – | – | – | – |
| **Processing speed – WISC-IV: Coding; Symbol Search*b*** |  |  |  |
| Intercept | 10.56 | 0.31 | 33.61 | < 0.0005 | 9.95 | 11.18 |
| Months | 0.18 | 0.11 | 1.54 | 0.124 | −0.05 | 0.40 |
| Cogmed × months | −0.24 | 0.16 | −1.56 | 0.119 | −0.55 | 0.06 |
| Exergaming × months | −0.15 | 0.16 | −0.93 | 0.354 | −0.47 | 0.17 |
| Control × months | 0.00 | – | – | – | – | – |
| **Parent rating of behavioral regulation – BRIEF: Inhibition, Shifting, Emotional Controld** |
| Intercept | 49.47 | 1.18 | 41.79 | < 0.0005 | 47.15 | 51.79 |
| Months | 0.06 | 0.39 | 0.16 | 0.88 | -0.71 | 0.83 |
| Cogmed × months | -0.03 | 0.52 | -0.05 | 0.96 | -1.05 | 0.99 |
| Exergaming × months | -0.48 | 0.58 | -0.83 | 0.41 | -1.62 | 0.66 |
| Control × months | 0.00 | – | – | – | – | – |
| **Parent rating of working memory – BRIEF: Working Memoryd** |
| Intercept | 53.46 | 1.58 | 33.89 | < 0.0005 | 50.37 | 56.55 |
| Months | -0.40 | 0.55 | -0.73 | 0.47 | -1.47 | 0.68 |
| Cogmed × months | 0.81 | 0.81 | 1.01 | 0.32 | -0.78 | 2.40 |
| Exergaming × months | -0.07 | 0.78 | -0.10 | 0.92 | -1.61 | 1.46 |
| Control × months | 0.00 | – | – | – | – | – |
| **Motor abilities – DMT 6–18*c*** |  |  |  |  |
| Intercept | 95.87 | 0.89 | 108.29 | < 0.0005 | 94.14 | 97.61 |
| Months | 0.58 | 0.33 | 1.75 | 0.080 | −0.07 | 1.23 |
| Cogmed × months | −0.01 | 0.46 | −0.02 | 0.984 | −0.90 | 0.88 |
| Exergaming × months | −0.22 | 0.48 | −0.47 | 0.639 | −1.16 | 0.71 |
| Control × months | 0.00 | . | . | . | . | . |

*Note*. WMTB = Working Memory Test Battery; D-KEFS = Delis–Kaplan Executive Function System; TONI-4 = Test of Nonverbal Intelligence Fourth Edition; WISC-IV = Wechsler Intelligence Scale for Children Fourth Edition; DMT = German Motor Performance Test.

a Age-normed score: mean = 100; standard deviation = 15; a higher score is better.

b Age-normed score: mean = 10; standard deviation = 3; a higher score is better.

c Age-normed score: mean = 100; standard deviation = 10; a higher score is better.

d Age-normed score: mean = 50; standard deviation = 10; a higher score is better.

﻿e No random intercept parameters were estimated as model fit was better without them.