**Supplementary Materials**

Supplementary table 1. Descriptive statistics of cognitive outcomes across all time points

|  |  |  |  |
| --- | --- | --- | --- |
| **Timepoint** | **Measure** | **AT** | **AC** |
| **Valid N** | **Mean** | **SD** | **Valid N** | **Mean** | **SD** |
| Baseline |  |  |  |  |  |  |  |  |
|  | Digit span forward | 22 | 9.23 | 2.43 | 27 | 9.59 | 1.95 |
|  | Digit span backward | 22 | 4.27 | 2.00 | 27 | 4.07 | 1.94 |
|  | Total learning | 22 | 40.32 | 11.52 | 27 | 37.70 | 9.35 |
|  | Delayed recall | 22 | 7.95 | 3.47 | 27 | 7.56 | 2.90 |
|  | Recognition | 22 | 12.91 | 2.56 | 27 | 12.81 | 2.40 |
|  | CTT - interference | 19 | 1.33 | 0.81 | 27 | 0.88 | 0.50 |
|  | Block design | 22 | 19.27 | 7.25 | 27 | 20.59 | 9.50 |
| 3rd month |  |  |  |  |  |  |  |
|  | Digit span forward | 19 | 10.21 | 2.37 | 24 | 9.58 | 2.15 |
|  | Digit span backward | 19 | 4.89 | 1.91 | 24 | 4.74 | 2.09 |
|  | Total learning | 19 | 50.00 | 11.16 | 24 | 41.89 | 9.68 |
|  | Delayed recall | 19 | 9.74 | 3.45 | 24 | 8.52 | 2.44 |
|  | Recognition | 19 | 14.05 | 1.18 | 24 | 13.07 | 1.75 |
|  | CTT - interference | 17 | 1.03 | 0.53 | 24 | 0.87 | 0.44 |
|  | Block design | 19 | 24.58 | 6.14 | 24 | 23.67 | 9.50 |

Note. AT=Art Therapy; AC = Active control; SD= standard deviation; CTT = Color trails test.

Supplementary table 2. Results of all estimated fixed covariates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Cognitive measure** | **df** | ***β*** | **95% CI** | **p** |
| Intercept |  |  |  |  |  |
|  | Digit span forward | 60.78 | 0.18 | [-0.22, 0.59] | 0.379 |
|  | Digit span backward | 64.65 | 0.04 | [-0.36, 0.45] | 0.830 |
|  | Total learning | 64.58 | 0.14 | [-0.24, 0.52] | 0.462 |
|  | Delayed recall | 64.81 | 0.14 | [-0.27, 0.54] | 0.505 |
|  | Recognition | 89.09 | 0.13 | [-0.27, 0.54] | 0.527 |
|  | CTT- Interference | 82.04 | -0.57 | [-0.99, -0.14] | 0.011 |
|  | Block design | 68.80 | 0.26 | [-0.14, 0.66] | 0.212 |
| Group |  |  |  |  |  |
|  | Digit span forward | 60.78 | -0.17 | [-0.71, 0.38] | 0.554 |
|  | Digit span backward | 64.65 | 0.10 | [-0.45, 0.65] | 0.713 |
|  | Total learning | 64.58 | 0.23 | [-0.28, 0.74] | 0.383 |
|  | Delayed recall | 64.81 | 0.13 | [-0.42, 0.67] | 0.651 |
|  | Recognition | 89.09 | 0.04 | [-0.50, 0.59] | 0.872 |
|  | CTT- Interference | 81.60 | 0.77 | [0.22, 1.33] | 0.008 |
|  | Block design | 68.80 | -0.16 | [-0.71, 0.38] | 0.566 |
| Time |  |  |  |  |  |
|  | Digit span forward | 45.10 | -0.42 | [-0.71, -0.12] | 0.008 |
|  | Digit span backward | 45.39 | -0.25 | [-0.59, 0.09] | 0.155 |
|  | Total learning | 45.58 | -0.81 | [-1.13, -0.50] | 0.000 |
|  | Delayed recall | 44.20 | -0.49 | [-0.84, -0.14] | 0.009 |
|  | Recognition | 44.90 | -0.55 | [-1.09, 0.00] | 0.055 |
|  | CTT- Interference | 43.26 | 0.56 | [0.02, 1.10] | 0.048 |
|  | Block design | 45.32 | -0.62 | [-1.00, -0.24] | 0.002 |
| Group \* Time |  |  |  |  |
|  | Digit span forward | 44.99 | 0.42 | [0.02, 0.81] | 0.044 |
|  | Digit span backward | 45.26 | 0.10 | [-0.35, 0.56] | 0.655 |
|  | Total learning | 45.44 | 0.50 | [0.07, 0.92] | 0.026 |
|  | Delayed recall | 44.06 | 0.21 | [-0.26, 0.68] | 0.379 |
|  | Recognition | 44.61 | 0.41 | [-0.32, 1.14] | 0.278 |
|  | CTT- Interference | 42.28 | -0.53 | [-1.23, 0.17] | 0.145 |
|  | Block design | 45.15 | 0.46 | [-0.05, 0.97] | 0.081 |

Note. Df= degree of freedom; CI= confidence interval; CTT= color trails test.