Supplementary Table 1. Pearson correlations matrix for navigation subtasks and neuropsychological tests.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 1. Route Sequence (DMP) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Route Sequence (FPP) | 0.11 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Route Continuation (DMP) | 0.05 | 0.09 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Route Continuation (FPP) | 0.19 | **0.21\*** | **0.38\*\*** | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Distance Comparison (DMP) | 0.14 | **0.25\*** | 0.07 | 0.13 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Distance Comparison (FPP) | -0.03 | 0.19 | **0.35\*\*** | **0.28\*\*** | 0.13 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. Location on Map (DMP) | **-0.22\*** | -0.15 | -0.19 | **-0.32\*\*** | **-0.34\*\*** | **-0.27\*\*** | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Location on Map (FPP) | 0.04 | **-0.25\*** | -0.19 | **-0.49\*\*** | **-0.26\*\*** | **-0.46\*\*** | **0.24\*** | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. Point to Start (DMP) † | **-0.28\*\*** | -0.14 | **-0.35\*\*** | **-0.21\*** | -0.08 | **-0.26\*\*** | **0.22\*** | **0.24\*** | 1 |  |  |  |  |  |  |  |  |  |  |  |
| 10. Point to Start (FPP) ‡ | -0.08 | **-0.26\*\*** | -0.15 | **-0.31\*\*** | -0.11 | **-0.22\*** | 0.18 | **0.41\*\*** | **0.3\*\*** | 1 |  |  |  |  |  |  |  |  |  |  |
| 11. Point to End (DMP) † | **-0.32\*\*** | **-0.25\*** | **-0.26\*\*** | **-0.28\*\*** | -0.13 | **-0.29\*\*** | **0.47\*\*** | **0.25\*** | **0.46\*\*** | **0.25\*** | 1 |  |  |  |  |  |  |  |  |  |
| 12. Point to End (FPP) ‡ | -0.14 | -0.19 | **-0.21\*** | **-0.4\*\*** | -0.12 | **-0.23\*** | **0.22\*** | **0.49\*\*** | **0.33\*\*** | **0.47\*\*** | 0.18 | 1 |  |  |  |  |  |  |  |  |
| 13. Perspective Taking (score) | -0.14 | -0.03 | **-0.43\*\*** | **-0.2\*** | -0.08 | -0.1 | 0.14 | **0.21\*** | **0.45\*\*** | 0.16 | **0.3\*\*** | **0.29\*\*** | 1 |  |  |  |  |  |  |  |
| 14. Corsi Span Forward (product) | **0.2\*** | **0.27\*\*** | 0.11 | **0.37\*\*** | 0.1 | 0.08 | -0.1 | **-0.33\*\*** | -0.17 | **-0.24\*** | **-0.25\*** | **-0.39\*\*** | -0.15 | 1 |  |  |  |  |  |  |
| 15. Corsi Span Backward (product) | 0.12 | 0.06 | **0.24\*** | 0.15 | 0.16 | 0 | **-0.2\*** | -0.04 | -0.19 | -0.09 | -0.18 | **-0.2\*** | **-0.32\*\*** | **0.31\*\*** | 1 |  |  |  |  |  |
| 16. Digit Span Forward (product) | -0.02 | 0.03 | 0.08 | 0.15 | -0.04 | 0.18 | 0.01 | -0.15 | 0.01 | -0.08 | -0.08 | -0.01 | -0.07 | 0.15 | 0.01 | 1 |  |  |  |  |
| 17. Digit Span Backward (product) | 0.19 | 0.08 | **0.21\*** | **0.2\*** | 0 | 0.15 | -0.07 | -0.09 | -0.11 | -0.01 | **-0.21\*** | -0.11 | **-0.21\*** | **0.21\*** | 0.14 | **0.55\*\*** | 1 |  |  |  |
| 18. Mental Rotation (accuracy) | 0.06 | 0.09 | **0.28\*\*** | 0.11 | -0.02 | 0.13 | -0.16 | **-0.28\*\*** | -0.19 | -0.17 | **-0.2\*** | **-0.25\*** | **-0.28\*\*** | 0.19 | 0.13 | 0.08 | 0.16 | 1 |  |  |
| 19. Mental Rotation (reaction time) | 0 | 0.13 | 0.08 | **0.22\*** | -0.03 | 0.1 | -0.07 | **-0.31\*\*** | 0.04 | -0.15 | 0.01 | -0.18 | 0.1 | 0.05 | **-0.21\*** | 0.06 | 0.04 | **0.5\*\*** | 1 |  |
| 20. Mental Rotation (slope) | -0.04 | 0.03 | -0.03 | 0.03 | -0.09 | -0.02 | 0.04 | -0.15 | 0.06 | -0.11 | 0.07 | -0.04 | -0.05 | -0.1 | -0.15 | 0.11 | 0.07 | **0.43\*\*** | **0.69\*\*** | 1 |

DMP = Dynamic Map perspective. FPP = First Person Perspective. † = Transformed using 10 for correlation analysis. ‡ = transformed using SQRT for correlation analysis. **\*** Significance at p<.05 **\*\*** Significance at p<0.01. Significant correlations printed in bold letters