**Supplementary Table 1.** Primary cognitive variables in the Older and Younger Study Groups.

|  |  |  |  |
| --- | --- | --- | --- |
| Characteristic | Older(*n* = 35) | Younger(*n* = 49) | *p*-value |
| Neurocognition |  |  |  |
| Executive Functions\* |  |  |  |
| D-KEFS 20-Questions  | 29.8 (14.6) [3-60] | 38.7 (16.2) [4-60] | .016 |
| D-KEFS TMT Condition 4 (sec) | 86.1 (47.3) [40-252] | 65.5 (19.2) [35-132] | .020 |
| Action (Verb) Fluency | 17.2 (5.9) [8-34] | 19.7 (6.5) [8-38] | .091 |
|  Simple Attention |  |  |  |
| WAIS-IV Digit Span Total | 18.5 (3.9) [12-27] | 18.1 (3.5) [13-27] | .687 |
| Serial 7s | 7.6 (4.6) [1-15] | 6.8 (4.1) [1-15] | .410 |
|  Memory\* |  |  |  |
| CVLT-II SF Trials 1-4 | 26.9 (5.9) [9-34] | 30 (2.7) [20-35] | .013 |
| CVLT-II SF SDFR  | 7.5 (1.7) [3-9] | 8.1 (0.9) [6-9] | .205 |
| CVLT-II SF LDFR | 7.0 (1.9) [3-9] | 7.8 (1.2) [4-9] | .207 |
| Visuomotor Processing Speed\* |  |  |  |
|  D-KEFS TMT Condition 1 (sec) | 22.7 (5.7) [14-37] | 19.3 (4.4) [14-30] | .006 |
|  D-KEFS TMT Condition 2 (sec) | 35.2 (22.8) [18-154] | 25.2 (6.3) [13-45] | .002 |
|  D-KEFS TMT Condition 3 (sec) | 33.6 (17.6) [14-112] | 25.3 (6.2) [16-51] | .014 |
|  D-KEFS TMT Condition 5 (sec) | 31.6 (12.5) [18-68] | 22.6 (8.2) [11-50] | <.001 |

|  |
| --- |
| *Note.* Data represent M (SD) [Sample range] or %; D-KEFS = Delis-Kaplan Executive Function System; TMT = Trail Making Test; WAIS-IV = Weschler Adult Intelligence Scale – IV; CVLT-II SF = California Verbal Learning Test-Second Edition Short Form; SDFR= Short Delay Free Recall; LDFR = Long Delay Free Recall. \*Included in the main mediation models |

**Supplementary Table 2.** Simple Correlation Matrix of Relevant Demographic Variables.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| 1. Age1 | – | – | – | – |
| 2. TOHRN accuracy | -.27\* | – | – | – |
| 3. Education | .09 | .00 | – | – |
| 4. Sex1  | .11 | -.16 | .04 | – |
| 5. Race/Ethnicity | .15 | .17 | .00 | -.18 |

*Note*. The values in this table reflect the Spearman’s correlation between each variable. Test of Online Health Records Navigation = TOHRN.

**\*** indicates correlation is significant at *p* < .05 level.

**1.** For univariable correlations with a continuous and a dichotomous variable, values in this table reflect point-biserial correlations.

**Supplementary Table 3.** Domain-LevelPrincipal Component Analysis (PCA) Loadings for the Cognitive Measures

|  |  |  |
| --- | --- | --- |
| *PCA Analysis 1: Attention a* | Component 1 (70.1%) Eigenvalue: 1.40 | Cronbach’s alpha |
| WAIS-IV Digit Span Total | .837 |  |
| Serial 7s | .837 | .581 |
| *PCA Analysis 2: Executive Functions b* | Component 1 (49.0%) Eigenvalue: 1.47 | Cronbach’s alpha |
| D-KEFS 20-Questions  | .623 |  |
| D-KEFS TMT Condition 4 (sec) | .706 | .476 |
| Action (Verb) Fluency | .764 |  |
| *PCA Analysis 3: Memory c* | Component 1 (79.8%) Eigenvalue: 2.40 | Cronbach’s alpha |
| CVLT-II SF Trials 1-4 | .923 |  |
| CVLT-II SF SDFR  | .911 | .873 |
| CVLT-II SF LDFR | .844 |  |
| *PCA Analysis 4: Visuomotor Processing Speed d* | Component 1 (67.2%) Eigenvalue: 2.69 | Cronbach’s alpha |
|  D-KEFS TMT Condition 1 (sec) | .660 |  |
|  D-KEFS TMT Condition 2 (sec) | .902 |  |
|  D-KEFS TMT Condition 3 (sec) | .904 | .831 |
|  D-KEFS TMT Condition 5 (sec) | .787 |  |

Note that, findings for the executive domain did not differ if the test that was dropped from the total cognitive composite (i.e., D-KEFS 20 Questions) was excluded from the above analyses.

**a** Kaiser–Meyer–Olkin (KMO) = .500; Bartlett’s test of sphericity: *X*2(1)= 14.3; *p*<.001

**b** Kaiser–Meyer–Olkin (KMO) = .581; Bartlett’s test of sphericity: *X*2(3)= 13.1; *p*=.004

**c** Kaiser–Meyer–Olkin (KMO) = ..709; Bartlett’s test of sphericity: *X*2(6)= 139.9; *p*<.001

**d** Kaiser–Meyer–Olkin (KMO) = .760; Bartlett’s test of sphericity: *X*2(6)= 151.7; *p*<.001