**Supplemental Tables**

**Table 1.** Total sample size for each model variable. Tasks were performed in a standard order. Some participants terminated the assessment before completing all tasks, or may have declined a single task. The mRS variable was added after study initiation so was not available in all participants.

|  |  |
| --- | --- |
| **Variables**  | **N** |
| Age | 437 |
| Sex  | 437 |
| Education | 437 |
| modified Rankin Scale (mRS)  | 207 |
| DOC-Cog score  | 437 |
| DOC Time  | 437 |
| Semantic Fluency(Z-score) | 418 |
| Phonemic Fluency(Scaled Score) | 420 |
| Digit Symbol Coding (Scaled Score) | 403 |
| TMT-A (Scaled Score) | 411 |
| TMT-B (Scaled Score) | 402 |
| CVLT Short Delay Free Recall (Z-score) | 414 |
| CVLT Long Delay Free Recall (Z-score) | 412 |

† TMT – Trails Making Test, CVLT = California Verbal Learning Test

DOC = **D**epression, **O**bstructive sleep apnea (OSA), and **C**ognitive impairment

**Table 2.** Overall Regression model fit for each neurospyschological assessment, controlling for age, sex, education, modified Rankin Scale (mRS) and DOC cognition scores.

|  |  |  |
| --- | --- | --- |
| **Model** | **F** | **Sig** |
| Semantic Fluency(Z-score) | 7.252 | < .001 |
| Phonemic Fluency(Scaled Score) | 6.745 | < .001 |
| Digit Symbol Coding (Scaled Score) | 8.918 | < .001 |
| TMT-A (Scaled Score) | 5.783 | < .001 |
| TMT-B (Scaled Score) | 7.607 | < .001 |
| CVLT Short Delay Free Recall (Z-score) | 10.780 | < .001 |
| CVLT Long Delay Free Recall (Z-score) | 9.923 | < .001 |

† TMT – Trails Making Test, CVLT = California Verbal Learning Test

DOC = **D**epression, **O**bstructive sleep apnea (OSA), and **C**ognitive impairment

**Table 3:** Linear Regression results showing the effect of DOC screen completion time on individual neuropsychological assessments using complete case data.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Measure** | **Test** | **B-value** | **Sig.** | **95% Confidence Interval** |
| Lower Bound | Upper Bound |
| Executive Function | Semantic Fluency(Z-score) | -.005 | **< .001** | -.007 | -.002 |
| Language (verbal fluency) | Phonemic Fluency(Scaled Score) | -.014 | **< .001** | -.020 | -.008 |
| Speed of Processing | Digit Symbol Coding (Scaled Score) | -.013 | **< .001** | -.018 | -.007 |
| Motor & Speed of processing | TMT-A (Scaled Score) | -.015 | **< .001** | -.021 | -.008 |
| Executive function & Speed of processing | TMT-B (Scaled Score) | -.016 | **< .001** | -.022 | -.010 |
| Memory | CVLT Short Delay Free Recall (Z-score) | -.002 | .163 | -.004 | .001 |
| CVLT Long Delay Free Recall (Z-score) | -.002 | .193 | -.004 | -.001 |

\*all models controlled for by age, sex, years of education, DOC-Cognition score and modified Rankin Scale (mRS)

†significant results bolded and set at p < 0.007

† TMT = Trails Making Test, CVLT = California Verbal Learning Test,

DOC = **D**epression, **O**bstructive sleep apnea (OSA), and **C**ognitive impairment

**Scatter plot of predicted probability of cognitive impairment by completion time of the DOC screen on each cognitive domain.**









