**Supplementary Materials**

Supplementary Material 1

*Brief Executive Language Screen: Sentence Completion Stimuli*

**A screenshot of a computer test

Description automatically generated**

Supplementary Material 2

*Brief Executive Language Screen: Sentence Completion Administration and Scoring*

**Sentence Completion: Score 0 to 22**

Initiation Administration**:** “*I am going to tell you a sentence that has the last word omitted. I would like you to say 1 word that completes the sentence meaningfully*”. Record response and note time from when you finish presenting the sentence until they start to respond (in seconds). Errors include no response at 20 seconds, a response containing three or more words (e.g., “the kind old man asked us to… see him home”) even if it meaningfully completes the sentence (remind person to try and give one-word responses, remind this only once), or agrammatical or non-meaningful responses (e.g., “the sun went down before we could… amazing).

**Scoring:** 1 point per correct response. Total raw score /10.

**Weighted Score /10:** Response score 0-2 (total raw score divided by 5). High Constraint Reaction Time score 0-4. Low Constraint Reaction Time score 0-4.

BELS Sentence Completion Initiation Reaction Time (seconds) Norms and Cut-Offs

|  |  |  |
| --- | --- | --- |
| **Score** | **HC** | **LC** |
| **4/4** | <4.09 | <14.50 |
| **2/4** | 4.09-5.30 | 14.51-19.70 |
| **0/4** | ≥5.31 | ≥19.71 |
| **Normative Data** |  |  |
| ***N*** | 109 | 109 |
| ***M*** | 2.87 | 9.29 |
| ***SD*** | 1.22 | 5.21 |

*Note*. Cut-off scores calculated based on healthy normative data.

4/4 = within or greater than 1SD below healthy mean (i.e., z score <0.99).

2/4 = if between 1 and 2SD above healthy mean (i.e., z score 1.00 to 1.99).

0/4 = if 2SD above healthy mean (i.e., z ≥ 2.00).

Inhibition Administration:“*I am going to tell you a sentence that has the last word omitted. This time finish my sentence with 1 word completely unconnected to the sentence - that is a nonsense word*.” Record response and note time from when you finish presenting the sentence until they start to respond (in seconds). If no response at 20 seconds mark as error. Repeat instruction on 1st 2 items if they complete it meaningfully. Note use of a strategy (e.g., objects in the room, colours, animals) but do not suggest the use of a strategy.

**Scoring:** 1 point per correct response. Total score /10. Error = blatant errors (i.e., completely connected word, e.g., ‘she went to the salon to colour her… “hair, nails”), somewhat connected responses (i.e., semantically connected to correct response or sentence, e.g., “she went to the salon to colour her… “dog”, “leg”), or no response provided in 20 seconds.

Give a strategy score /2. Score 2 = for three or more instances of strategy use. Examples of a strategy include: naming items around the room, things outside the window, furniture, colours, animals. Use of a strategy does not have to be across consecutive trials or the same strategy each time (e.g., they name furniture on two items and colours on two items). Score 1 = for one or two instances of strategy use. Score 0 = for no use of a strategy.

Total initiation (weighted score), inhibition and strategy scores.

Supplementary Table 1

*Descriptive Statistics for Controls and Stroke Patients (Demographic, Neuropsychology Baseline, BELS-SC)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Controls** | | | **Stroke (All)** | | |
|  | ***N*** | ***M***  **(*SD*)** | ***Range*** | ***N*** | ***M***  **(*SD*)** | ***Range*** |
| Age | 116 | 63.1 (13.52) | 18-88 | 88 | 62.88 (14.10) | 18-91 |
| Education | 116 | 15.12 (3.56) | 9-25 | 88 | 12.03 (2.71) | 7-20 |
| Days Since Stroke | - | - | - | 88 | 17.39 (13.68) | 2-49 |
| Gender (%F) | 116 | 47% | - | 88 | 43% | - |
| Handedness (%R) | 116 | 92% | - | 88 | 91% | - |
| Stroke Type (%Ischaemic) | - | - | - | 88 | 91% | - |
| **Neuropsychology Baseline** | | | | | | |
| VOSP Incomplete Letter /20 | 102 | 19.57 (0.65) | 17-20 | 85 | 19.39 (0.87) | 16-20 |
| NART Errors /50 | 112 | 16.13 (6.55) | 3-35 | 83 | 22.11 (7.29) | 3-42 |
| NART Premorbid IQ | 112 | 110.87(6.53) | 92-123 | 83 | 104.88 (7.26) | 85-123 |
| APM /12 | 104 | 8.81 (1.90) | 3-12 | 83 | 6.14 (3.02) | 0-12 |
| BNT /15 | 47 | 14.34 (0.89) | 11-15 | 78 | 13.31 (2.04) | 5-15 |
| Trails A RT | 90 | 29.48 (8.91) | 13.59-55.06 | 77 | 54.78 (40.31) | 17.75-281 |
| Trails Interference | 90 | 2.43(1.04) | 1.18-7.75 | 74 | 2.84(1.12) | 1.03-7.60 |
| Victoria Stroop CW Interference | 103 | 2.16 (0.65) | 1.27-5.00 | 76 | 2.30 (0.87) | 0.98-5.22 |
| Victoria Stroop CW %ile | 103 | 74.47 (34.72) | 2-100 | 77 | 53.71 (41.72) | 2-100 |
| **Hayling Sentence Completion Test** | | | | | | |
| Overall Scaled Score (SS) | 80 | 5.68 (1.23) | 1-9 | 67 | 4.19 (1.87) | 1-7 |
| **Initiation** | | | | | | |
| Initiation SS | 80 | 5.80 (0.68) | 3-7 | 68 | 5.10 (1.32) | 1-7 |
| Initiation RT | 74 | 13.67 (5.77) | 5.25-32.63 | 68 | 22.84 (27.45) | 6.50-210.82 |
| Initiation /15 | 79 | 14.77 (0.53) | 13-15 | 67 | 14.51 (1.08) | 8-15 |
| **Inhibition** | | | | | | |
| Inhibition RT SS | 80 | 5.60 (1.00) | 1-8 | 69 | 4.67 (1.80) | 1-6 |
| Inhibition Errors SS | 80 | 5.99 (1.85) | 2-8 | 69 | 4.39 (2.48) | 1-8 |
| Inhibition /15 | 79 | 11.66 (2.94) | 3-15 | 69 | 8.64 (4.32) | 0-15 |
| **Errors** |  |  |  |  |  |  |
| A: Connected | 79 | 0.92 (1.38) | 0-8 | 69 | 2.88 (3.87) | 0-14 |
| B: Partially Connected | 79 | 2.42 (2.26) | 0-9 | 69 | 3.33 (2.12) | 0-10 |
| **Strategy** | | | | | | |
| C5: Visual | 79 | 4.72 (3.51) | 0-13 | 69 | 2.61 (2.97) | 0-11 |
| C6: Semantic | 79 | 1.72 (1.45) | 0-7 | 69 | 1.45 (2.19) | 0-12 |
| C7: Visual and Semantic | 79 | 1.27 (1.53) | 0-6 | 69 | 0.55 (1.20) | 0-7 |
| Proportion Correct with Strategy | 79 | 0.64 (0.24) | 0.22-1.00 | 67 | 0.47 (0.29) | 0-1 |
| **BELS Sentence Completion** | | | | | | |
| **Initiation** | | | | | | |
| Initiation High Constraint /5 | 116 | 4.99 (0.09) | 4-5 | 88 | 4.95 (0.21) | 4-5 |
| Initiation High Constraint RT | 109 | 2.87 (1.22) | 1.22-6.55 | 88 | 4.76 (4.34) | 1.18-27.56 |
| **Selection** | | | | | | |
| Initiation Low Constraint /5 | 116 | 4.77 (0.44) | 3-5 | 88 | 4.43 (0.76) | 2-5 |
| Initiation Low Constraint RT | 109 | 9.29 (5.21) | 2.89-34.00 | 88 | 15.47 (11.36) | 3.85-59.72 |
| *Initiation (Weighted Total) /10* | 109 | 9.22 (1.56) | 2-10 | 88 | 7.54 (2.89) | 1.40-10 |
| **Inhibition** | | | | | | |
| Inhibition High Constraint /5 | 115 | 4.22 (0.88) | 1-5 | 86 | 2.28 (1.69) | 0-5 |
| Inhibition Low Constraint /5 | 115 | 3.79 (1.27) | 1-5 | 86 | 1.93 (1.71) | 0-5 |
| **Errors** |  |  |  |  |  |  |
| A: Connected | 112 | 0.34 (0.58) | 0-2 | 86 | 2.31 (2.69) | 0-10 |
| B: Partially Connected | 112 | 1.66 (1.51) | 0-6 | 86 | 3.15 (1.93) | 0-7 |
| **Strategy** | | | | | | |
| Inhibition Strategy /2 | 115 | 1.82 (0.45) | 0-2 | 86 | 0.99 (0.85) | 0-2 |
| C5: Visual Strategy | 115 | 3.00 (2.26) | 0-8 | 86 | 1.08 (1.95) | 0-10 |
| C6: Semantic Strategy | 115 | 1.04 (1.25) | 0-6 | 86 | 0.70 (1.14) | 0-5 |
| C7: Visual and Semantic | 115 | 0.77 (1.39) | 0-7 | 86 | 0.12 (0.39) | 0-2 |
| Proportion Correct w Strategy | 114 | 0.61 (0.26) | 0-1 | 73 | 0.45 (0.36) | 0-1 |
| **Sentence Completion Total /22** | 108 | 19.17 (2.39) | 13-22 | 86 | 12.78 (5.52) | 1.60-22.00 |

*Note*. Stroke (All) includes LHS, RHS, and 2 bilateral stroke patients. RT = ‘reaction times’ in seconds. HSCT and BELS ‘Proportion Correct with Strategy’ has missing data due to some participants scoring 0 correct, and thus was unable to be calculated (correct with strategy/total correct). Errors: higher value = worse performance. 5th percentile cut-offs (*z* < -1.645) for impairment: HSCT scaled scores (from HSCT Manual, page 5, Burgess & Shallice, 1996); HSCT RT and global error score (Tables 2 and 3 in Burgess & Shallice, 1996b); APM (Murphy et al., 2023); TMT (Tombaugh et al., 1998); NART (Bright et al., 2018); Stroop (Troyer et al., 2006); BNT (younger - Abeare et al., 2022; older – Fastenbau et al., 1998). All other cut-offs based on current control sample. Stroop Interference = CW RT / Dot RT. Trails Interference = Trails B RT/ Trails A RT.

Supplementary Table 2

*Neuropsychology Baseline and HSCT Comparisons for Controls, LHS, and RHS.*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Kruskal-Wallis*** | | | | ***Pairwise Comparisons*** | | | | | |
|  | ***N*** | ***H*** | ***df*** | ***p*** | ***Groups*** | ***N*** | | ***U*** | ***p*** | ***r*** |
| Age | 202 | 0.38 | 2 | .826 | ***-*** | ***-*** | | ***-*** | ***-*** | ***-*** |
| Education | 202 | 37.47 | 2 | **<.001** | R - L | 86 | | 813.00 | .899 | - |
|  |  |  |  |  | **C > R** | 173 | | 1680.50 | <.001 | .64 |
|  |  |  |  |  | **C > L** | 145 | | 817.00 | <.001 | .40 |
| **Visual Perception**  VOSP-IL /20 | 185 | 2.15 | 2 | .341 | - | - | | - | **-** | - |
| **Premorbid Intelligence** |  |  |  |  | R - L | 81 | | 669.50 | .550 | - |
| NART IQ | 193 | 31.57 | 2 | **<.001** | **C > R** | 166 | | 657.00 | **<.001** | .34 |
|  |  |  |  |  | **C > L** | 139 | | 1755.50 | **<.001** | .39 |
| **Fluid Intelligence** |  |  |  |  | R - L | 81 | | 570.50 | .087 | - |
| APM /12 | 185 | 38.54 | 2 | **<.001** | **C > R** | 157 | | 1107.50 | **<.001** | .49 |
|  |  |  |  |  | **C > L** | 132 | | 987.50 | **.008** | .23 |
| **Naming** |  |  |  |  | R - L | 77 | | 682.50 | .969 | - |
| BNT/15 | 124 | 10.27 | 2 | **.006** | **C > R** | 96 | | 764.50 | **.003** | .31 |
|  |  |  |  |  | **C > L** | 75 | | 453.00 | **.016** | .28 |
| **Processing Speed** |  |  |  |  | R - L | 76 | | 541.50 | .235 | - |
| TMT A RT | 166 | 32.37 | 2 | **<.001** | **C < R** | 140 | | 1006.00 | **<.001** | .46 |
|  |  |  |  |  | **C < L** | 116 | | 692.00 | **.002** | .29 |
| **Inhibition** |  |  |  |  |  |  | |  |  |  |
| Stroop CW Interference | 178 | 1.76 | 2 | .414 | - | - | | - | **-** | - |
| Stroop CW Percentile | 174 | 8.80 | 2 | .012 | - | - | | - | **-** | - |
|  |  |  |  |  |  |  | |  |  |  |
|  |  |  |  |  |  |  | |  |  |  |
| TMT Interference | 163 | 11.21 | 2 | **.004** | R - L | 73 | | 448.00 | .077 | - |
|  |  |  |  |  | C - R | 138 | | 2598.00 | .050 | - |
|  |  |  |  |  | **C < L** | 115 | | 1575.00 | **.002** | .28 |
| **HSCT** | | | | | | | | | | |
| **Overall SS** | 147 | 28.13 | 2 | **<.001** | R - L | 67 | 409.00 | | .148 | - |
|  |  |  |  |  | **C > R** | 123 | 2650.50 | | **<.001** | .47 |
|  |  |  |  |  | **C > L** | 104 | 652.00 | | **.010** | .25 |
| **Initiation SS** | **147** | **14.52** | **2** | **<.001** | R - L | 67 | 505.50 | | .881 | - |
|  |  |  |  |  | **C > R** | 123 | 2297.50 | | **<.001** | .32 |
|  |  |  |  |  | **C > L** | 104 | 684.50 | | **.010** | .25 |
| Initiation Correct /15 | 145 | 3.60 | 2 | .165 | ~~-~~ | ~~-~~ | | ~~-~~ | ~~-~~ | ~~-~~ |
| Initiation RT | 141 | 9.38 | 2 | .009 | ~~-~~ | ~~-~~ | | ~~-~~ | ~~-~~ | ~~-~~ |
| **Inhibition RT SS** | 148 | 14.71 | 2 | **<.001** | R - L | 68 | 466.00 | | .326 | - |
|  |  |  |  |  | **C > R** | 123 | 2329.50 | | **<.001** | .34 |
|  |  |  |  |  | **C > L** | 105 | 788.00 | | .047 | - |
| **Inhibition Error SS** | 148 | 19.02 | 2 | **<.001** | R - L | 68 | 403.50 | | .082 | - |
|  |  |  |  |  | **C > R** | 123 | 2522.00 | | **<.001** | .39 |
|  |  |  |  |  | **C > L** | 105 | 728.50 | | .093 | - |
| Inhibition Correct /15 | 147 | 21.81 | 2 | **<.001** | R - L | 68 | | 421.00 | .137 | - |
|  |  |  |  |  | **C > R** | 122 | | 860.00 | **<.001** | .41 |
|  |  |  |  |  | C - L | 104 | | 683.00 | .020 | - |
| **Errors** |  |  |  |  |  |  | |  |  |  |
| A: Connected | 147 | 18.59 | 2 | **<.001** | R - L | 67 | | 349.00 | .019 | - |
|  |  |  |  |  | **C < R** | 122 | | 931.00 | **<.001** | .39 |
|  |  |  |  |  | C - L | 104 | | 899.50 | .468 | - |
| B: Partially Connected | 147 | 7.60 | 2 | 0.22 | - | - | | - | **-** | - |
|  |  |  |  |  |  |  | |  |  |  |
| **Strategy** |  |  |  |  |  |  | |  |  |  |
| C5: Visual | 147 | 17.95 | 2 | **<.001** | R - L | 67 | | 464.00 | .414 | - |
|  |  |  |  |  | **C >R** | 122 | | 926.50 | **<.001** | .38 |
|  |  |  |  |  | C - L | 104 | | 708.50 | .033 | - |
| C6: Semantic | 147 | 6.08 | 2 | .048 | - | - | | - | **-** | - |
| C7: Visual and Semantic | 147 | 16.34 | 2 | **<.001** | R - L | 67 | | 417.00 | .067 | - |
|  |  |  |  |  | **C > R** | 122 | | 1278.00 | **.015** | .22 |
|  |  |  |  |  | **C > L** | 104 | | 549.00 | **<.001** | .36 |
| Prop. Correct w Strategy | 145 | 13.90 | 2 | **<.001** | R - L | 66 | | 500.50 | .874 | - |
|  |  |  |  |  | **C > R** | 120 | | 988.00 | **<.001** | .32 |
|  |  |  |  |  | C - L | 104 | | 686.50 | .022 | - |

*Note*. Bonferroni correction applied to Kruskal-Wallis analyses (neuropsychology baseline α = .007; HSCT α = .003) and follow-up pairwise comparisons (α = .017). C = Controls, R = RHS, L = LHS.

Supplementary Table 3

*Descriptive Statistics and Comparison of LHS, RHS, and age and education-matched controls*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Controls** | | | | **Stroke** | | | | | |
|  |  | |  |  | **LHS** | | | **RHS** | | |
|  | ***N*** | ***M* (*SD*)** | | ***Range*** | ***N*** | ***M* (*SD*)** | ***Range*** | ***N*** | ***M* (*SD*)** | ***Range*** |
| Age | 70 | 61.71 (15.51) | | 18.00-88.00 | 29 | 62.34 (14.55) | 28.00-91.00 | 57 | 63.56 (13.01) | 18.00-86.00 |
| Education | 70 | 12.79 (1.95) | | 9.00-16.00 | 29 | 12.03 (2.31) | 8.00-16.00 | 57 | 12.12 (2.87) | 7.00-20.00 |
| 1Estimated NART IQ | 69 | 109.48(6.42) | | 92.00-123.00 | 27 | **104.22(5.81)\*\*\*** | 92.00-115.00 | 54 | **105.59(7.69)\*\*** | 85.00-123.00 |
| Days Since Stroke | - | - | | - | 29 | 17.45(12.36) | 2.00-48.00 | 57 | 17.63 (14.57) | 2.00-49.00 |
| Gender (%F) | 70 | 46% | | - | 29 | 45% | - | 57 | 42% | - |
| Handedness (%R) | 70 | 93% | | - | 29 | 90% | - | 57 | 93% | - |
| Stroke Type (%Ischemic) | - | - | | - | 29 | 93% | - | 57 | 90% | - |
| **Neuropsychology Baseline** | | | | | | | | | | |
| 2VOSP Incomplete Letters /20 | 65 | 19.62 (0.60) | | 18.00-20.00 | 29 | 19.48 (0.74) | 17.00-20.00 | 54 | 19.31 (0.95) | 16.00-20.00 |
| 3APM /12 | 66 | 8.36 (1.91) | | 3.00-12.00 | 28 | 6.93 (3.27) | 0.00-11.00 | 53 | **5.79 (2.87)\*\*\*** | 0.00-12.00 |
| 4BNT /15 | 34 | 14.21 (0.98) | | 11.00-15.00 | 28 | 13.11 (2.47) | 6.00-15.00 | 49 | 13.45 (1.78) | 5.00-15.00 |
| 5Trails A RT | 56 | 27.88 (8.27) | | 13.59-53.00 | 26 | **52.17 (51.70)\*\*\*** | 18.06-281.00 | 50 | **55.93 (33.91)\*\*\*** | 17.75-153.00 |
| Trails Switching | 56 | 2.55 (1.22) | | 1.29-7.75 | 25 | **3.25 (1.51)\*\*** | 1.03-7.60 | 48 | 2.64 (0.80) | 1.28-4.33 |
| 6Victoria Stroop Interference | 47 | 2.18 (0.65) | | 1.34-4.26 | 26 | 2.35 (1.13) | 0.98-5.22 | 49 | 2.29 (0.71) | 1.21-5.12 |
| Victoria Stroop CW Percentile | 47 | 77.04(32.15) | | 2.00-100.00 | 24 | 57.58 (41.62) | 2.00-100.00 | 47 | **57.23 (40.53)\*** | 2.00-100.00 |
| **7Hayling Sentence Completion Test** | | | | | | | | | | |
| Overall Scaled Score (SS) | 50 | 5.92 (1.10) | | 3.00-9.00 | 24 | **4.54 (1.93)\*\*** | 1.00-7.00 | 42 | **3.95 (1.82)\*\*\*** | 1.00-6.00 |
| **Initiation** | | | | | | | | | | |
| Initiation SS | 50 | 5.86 (0.54) | | 4.00.7.00 | 24 | **5.08 (1.44)\*** | 1.00-7.00 | 43 | **5.09 (1.27)\*\*\*** | 1.00-6.00 |
| Initiation RT | 46 | 13.08 (4.88) | | 5.25-24.40 | 24 | 26.96 (41.12) | 6.50-210.82 | 43 | **20.86 (16.08)\*\*** | 7.40-97.37 |
| Initiation /15 | 50 | 14.76 (0.56) | | 13.00-15.00 | 24 | 14.25 (1.60) | 8.00-15.00 | 42 | 14.64 (0.62) | 13.00-15.00 |
| **Inhibition** | | | | | | | | | | |
| Inhibition RT SS | 50 | 5.80 (.99) | | 1.00-8.00 | 25 | **4.84 (1.86)\*\*** | 1.00-6.00 | 43 | **4.53 (1.79)\*\*\*** | 1.00-6.00 |
| Inhibition Errors SS | 50 | 6.10 (1.78) | | 1.00-8.00 | 25 | 4.96 (2.46) | 1.00-8.00 | 43 | **4.00 (2.45)\*\*\*** | 1.00-8.00 |
| Inhibition /15 | 50 | 11.80 (2.82) | | 3.00-15.00 | 25 | 9.56 (4.01) | 1.00-15.00 | 43 | **7.98 (4.40)\*\*\*** | 0.00-15.00 |
| **Errors** | | | | | | | | | | |
| A: Connected | 50 | 0.90 (1.22) | | 0.00-5.00 | 25 | 1.76 (2.91) | 1.00-15.00 | 43 | ***3.60 (4.23)\*\*\*^*** | 0.00-14.00 |
| B: Partially Connected | 50 | 2.30 (2.25) | | 0.00-7.00 | 25 | 3.44 (1.85) | 0.00-7.00 | 43 | 3.33 (2.28) | 0.00-10.00 |
| **Strategy** | | | | | | | | | | |
| C5: Visual | 50 | 5.04 (3.46) | | 0.00-13.00 | 25 | **3.24 (3.71)\*\*** | 0.00-11.00 | 43 | **2.12 (2.28)\*\*\*** | 0.00-8.00 |
| C6: Semantic | 50 | 1.58 (1.33) | | 0.00-7.00 | 25 | 1.44 (2.55) | 0.00-12.00 | 43 | 1.49 (2.00) | 0.00-7.00 |
| C7: Visual and Semantic | 50 | 1.34 (1.53) | | 0.00-6.00 | 25 | **0.28 (0.89)\*\*** | 0.00-4.00 | 43 | **0.70 (1.34)\*\*\*** | 0.00-7.00 |
| Prop. Correct with Strategy | 50 | 0.65 (0.24) | | 0.00-1.00 | 25 | 0.48 (0.32) | 0.00-1.00 | 41 | **0.46 (0.27)\*\*\*** | 0.00-1.00 |
| **BELS Sentence Completion** | | | | | | | | | | |
| **Initiation** | | | | | | | | | | |
| Initiation High Constraint /5 | 70 | 5.00 (0.00) | | 5.00-5.00 | 29 | 5.00 (0.00) | 5.00-5.00 | 57 | **4.93 (0.26)\*** | 4.00-5.00 |
| Initiation High Constraint RT | 65 | 2.88 (1.25) | | 1.22-6.55 | 29 | 3.95 (2.43) | 1.67-11.42 | 57 | **5.09 (4.99)\*\*** | 1.18-27.56 |
| **Selection** |  |  | |  |  |  |  |  |  |  |
| Initiation Low Constraint /5 | 70 | 4.79 (0.45) | | 3.00-5.00 | 29 | **4.38 (0.82)\*** | 2.00-5.00 | 57 | **4.47 (0.73)\*** | 2.00-5.00 |
| Initiation Low Constraint RT | 65 | 9.12 (4.86) | | 3.00-34.00 | 29 | **15.95 (10.10)\*\*\*** | 6.10-57.20 | 57 | **14.89 (11.63)\*\*\*** | 3.85-59.72 |
| *Initiation (Weighted) /10* | 65 | 9.25 (1.47) | | 3.80-10.00 | 29 | **7.60 (2.73)\*\*\*** | 1.80-10.00 | 57 | **7.56 (2.93)\*\*\*** | 1.40-10.00 |
| **Inhibition** | | | | | | | | | | |
| Inhibition High Constraint /5 | 69 | 4.19 (0.94) | | 1.00-5.00 | 29 | **3.10 (1.50)\*\*** | 0.00-5.00 | 55 | ***1.87 (1.63)\*\*\*^^*** | 0.00-5.00 |
| Inhibition Low Constraint /5 | 69 | 3.80 (1.27) | | 1.00-5.00 | 29 | **2.55 (1.88)\*\*** | 0.00-5.00 | 55 | **1.65 (1.54)\*\*\*** | 0.00-5.00 |
| **Errors** |  |  | |  |  |  |  |  |  |  |
| A: Connected | 68 | 0.31 (0.53) | | 0.00-2.00 | 29 | 1.38 (2.44) | 0.00-10.00 | 55 | ***2.76 (2.75)\*\*\*^^*** | 0.00-10.00 |
| B: Partially Connected | 68 | 1.68 (1.55) | | 0.00-6.00 | 29 | 2.62 (1.88) | 0.00-6.00 | 55 | **3.40 (1.94)\*\*\*** | 0.00-7.00 |
| **Strategy** | | | | | | | | | | |
| Strategy /2 | 69 | 1.83 (0.42) | | 0.00-2.00 | 29 | **1.24 (0.87)\*\*** | 0.00-2.00 | 55 | **0.89 (0.81)\*\*\*** | 0.00-2.00 |
| C5: Visual | 69 | 3.01 (2.18) | | 0.00-8.00 | 29 | **1.59 (2.31)\*\*\*** | 0.00-9.00 | 55 | **0.85 (1.74)\*\*\*** | 0.00-10.00 |
| C6: Semantic | 69 | 1.04 (1.27) | | 0.00-6.00 | 29 | 1.21 (1.45) | 0.00-5.00 | 55 | ***0.45 (0.86)\*\*\*^^*** | 0.00-5.00 |
| C7: Visual & Semantic | 69 | 0.71 (1.42) | | 0.00-7.00 | 29 | **0.10 (0.41)\*\*** | 0.00-2.00 | 55 | **0.13 (0.39)\*\*** | 0.00-2.00 |
| Prop. Correct with Strategy | 68 | 0.61 (0.25) | | 0.00-1.00 | 27 | 0.46 (0.33) | 0.00-1.00 | 45 | 0.46 (0.38) | 0.00-1.00 |
| **Sentence Completion /22** | 64 | 19.24 (2.50) | | 13.00-22.00 | 29 | **14.50(4.83)\*\*\*** | 5.40-21.80 | 55 | **12.05 (5.61)\*\*\*** | 1.60-22.00 |

*Note*. For patient groups vs. controls: \*p < .05; \*\*p<.01, \*\*\*p<.001. For RHS vs LHS, ^p<.05, ^^p<.01. Comparisons reflect pairwise follow-up Mann-Whitney U comparisons after Kruskal-Wallis analyses, and have been adjusted for multiple comparisons using Bonferroni corrections (α = .017). RT = ‘reaction times’ in seconds. HSCT and BELS ‘Proportion Correct with Strategy’ has missing data due to some participants scoring 0 correct. Bolded M(SD) indicates significant difference from controls. Bolded and italicized M(SD) indicates significant difference between patient groups. 1National Adult Reading Test (NART-2nd Edition; Nelson & Willison, 1991); 2Visual Object Spatial Perception: Incomplete Letters (VOSP-IL; Warrington & James, 1991); 3Advanced Progressive Matrices (APM, Set 1; Raven, 1965, 1994); 4Boston Naming Test (BNT-Short Form; Mack et al., 1992); 5Trails Making Test Part A (Strauss et al., 2006); 6Spreen & Strauss, 1998; 7Burgess & Shallice, 1996.