Table 1. Performance of FG and norms (mean and S.D. or range) on neuropsychological tests

| Test | FG's score | Norm | | |
|---|------------|---------------------|--|--|
| Attention, Working memory and executive | | | | |
| <u>functions</u> | 28 | 33.31 (9.8) | | |
| Symbol Digit Modalities test | 5 | 5.2 (.8) | | |
| Corsi block tapping test forward | 4 | 4.9 (1.1) | | |
| Corsi block tapping test backward | 4 | 5.5 (1.1) | | |
| Forward digit span | 3 | 4 (1.2) | | |
| Backward digit span | | | | |
| Brown-Peterson test | 100% | 98.33% (4.47) | | |
| - no interference | 42%* | 97.22% (4.46) | | |
| - mean of interference scores | | | | |
| Stroop Test | 74 sec. | 48.5 sec (25-86) | | |
| - Color name reading | 105 sec. | 69.4 sec (46-123) | | |
| - Color naming | 249 sec.* | 142.4 sec. (88-204) | | |
| - Interference | | | | |
| Trail Making Test | 61 sec.* | 41.3 sec. (15) | | |
| - Part A | 253 sec.* | 111.4 sec. (72.2) | | |
| - Part B | | | | |
| Visual-perceptual tests | | | | |
| - BORB | | | | |

| - Length match task (30) | 28 | 26.9 (1.6) |
|---|----|--------------|
| - Size match task (30) | 27 | 27.3 (2.4) |
| - Orientation match task (30) | 24 | 24.8 (2.6) |
| - Minimal feature view match (25) | 25 | 23.3 (2.0) |
| - Foreshortened view task (25) | 25 | 21.6 (2.6) |
| - Object decision – easy subtest (32) | 30 | 30.5 (1.4) |
| - Object decision – hard subtest (32) | 25 | 27.0 (2.2) |
| Motor control tests | | |
| Pantomime imitation subtest (PENO) (35) | 29 | 31.69 (2.6) |
| Arbitrary gesture imitation subtest (PENO) | 33 | 32.54 (1.6) |
| (35) | | |
| Episodic memory | 9 | 11.62 (2,6) |
| Immediate story retelling subtest (PENO) (23) | | |
| DMS-48 | 44 | 46.08 (2.4) |
| - first recall (48) | 45 | 46.56 (1.92) |
| - second recall (48) | 28 | 28.6 (1.54) |
| Pictorial recognition memory test (30) | 24 | 22.1 (2.1) |
| Short recognition memory test for faces (25) | | |

* Indicates a score below the norm or outside the normal range

| Test | FG's score | Norm |
|--|------------|--------------|
| Language | | |
| BECLA | | |
| - same-different judgement on spoken non-word pairs (36) | 30 | 31.67 (1.15) |
| - allographic matching on graphemes (26) | 25 | 25.67 (.58) |
| - auditory lexical-decision (20) | 18 | 19 (1.73) |
| - written lexical-decision (20) | 20 | 19.67 (.58) |
| - repetition of words and non-words (25) | 25 | 24 (.58) |
| - reading of words (25) | 24 | 24.17 (.58) |
| - reading of non-words (25) | 15 | 22.5 (.82) |
| - written spelling of words (36) | 24 | 31.19 (3.06) |
| - written spelling of non-words (15) | 10 | 13.17 (1.86) |
| Picture naming (DO-80) (80) | 72 | 74.9 (2.94) |
| Letter fluency (PENO) | 5* | 45.46 (16.4) |
| Category fluency (PENO) | 14* | 47.85 (9.8) |
| Pyramids and Palm Trees Test (52) | 47 | 49.4 (1.74) |
| Token test (36) | 29 | 29-36 |
| Spoken word/sentence-to-picture matching (MT-86) (47) | 44 | 44.6 (2.19) |
| Written word/sentence-to-picture matching (MT-86) (12) | 12 | 10.81 (.81) |

Table 2. Performance of FG and norms (mean and S.D. or range) on language tests

| Table 3. Performance of FG and control subjects (number and percent correct; values in |
|--|
| brackets correspond to S.D.) in the verb and non-verb conjugation tasks. |

| Conjugation tasks | Regular verbs | | Subregular verbs | | Irregular verbs | |
|---|-------------------|----------------------|----------------------|----------------------|-----------------|-----------|
| | FG | Controls | FG | Controls | FG | Controls |
| Infinitive ↔ present (24) | 24 (100%) | 24 (100%) | 22 (92%) | 23.75 [.25] (99%) | 24 (100%) | 24 (100%) |
| Present ↔ future (24) | 24 (100%) | 24 (100%) | 22 (92%) | 22 [.71] (92%) | 24 (100%) | 24 (100%) |
| Infinitive \leftrightarrow future (24) | 24 (100%) | 24 (100%) | 17 (71%) | 23 [.58] (96%) * | 24 (100%) | 24 (100%) |
| | Regular non-verbs | | Subregular non-verbs | | | |
| | FG | Controls | FG | Controls | | |
| Infinitive \leftrightarrow present (24) | 24 (100%) | 23.75 [.05] (99%) | 18 (75%) | 22.25[.16] (96%) | | |
| Present ↔ future (24) | 14 (58%) | 24 (100%)*** | 13 (54%) | 21 [.29] (87.5%)* | | |
| Infinitive \leftrightarrow future (24) | 1 (4%) | 24 (100%)*** | 24 (100%) | 23.75 [.05] (99%) | | |

Difference between FG and controls: * p < .05; *** $p \le .001$

Table 4. Performance of FG and control subjects (number and percent correct) in the adjective and non-adjective gender inflection tasks

| Gender inflection | "No-rule adjectives" (10) | | "Rule adjectives" (20) | | Irregular adjectives (5) | |
|----------------------|---------------------------|------------------|--|-----------|--------------------------|----------|
| | FG | Controls | FG | Controls | FG | Controls |
| Masculine ↔ feminine | 10 (100%) | 10 (100%) | 20 (100%) | 20 (100%) | 5 (100%) | 5 (100%) |
| Feminine ↔ masculine | 10 (100%) | 10 (100%) | 20 (100%) | 20 (100%) | 5 (100%) | 5 (100%) |
| | "No-rule non-a | djectives'' (10) | tives" (10) "Rule non-adjectives" (20) | | I | |
| | FG | Controls | FG | Controls | | |
| Masculine ↔ feminine | 0 (00%) | 10 (100%) | 12 (65%) | 20 | | |
| Mascume ↔ reminine | 9 (90%) | 10 (100%) | 13 (65%) | (100%)** | | |
| | 10 (100%) | 9.75 [.5] | <i>(</i> (200()) | 17 [3.16] | | |
| Feminine ↔ masculine | 10 (100%) | (97.5%) | 6 (30%) | (85%)** | | |

Difference between FG and controls: ** p<.01

Table 5: Performance of FG and control subjects (number and percent correct; values in

brackets correspond to S.D.) corresponding to the syntactic structures used in the

anagram task

| Syntactic structures | | Examples | FG | Controls |
|-------------------------|----|--|---------|-------------|
| | | | | |
| Canonical | 1 | Le garçon creuse un trou avec ses | 16/16 | 16 [0] |
| (nominalised active) | I | parents (the boy digs a hole with his parents) | (100%) | (100%) |
| | 2 | La fillette confie un secret à ses amies | 15/16 | 16 [0] |
| | Ζ | ((the girl confides a secret to her friends) | (94%) | (100%) |
| Non-canonical | 1' | Il le creuse avec eux (He digs it with | 14/16 | 16 [0] |
| (pronominalized active) | I | them) | (87.5%) | (100%) |
| | 2, | Elle le leur confie (She confides it to | 8/16** | 15.75 [0.2] |
| | | them) | (50%) | (8%) |

Note: 1 = 2 arguments and 1 modifier; 1' = 2 clitic pronouns and 1 disjoint pronoun; 2 = 3 arguments; 2' = 3 clitic pronouns

Difference between FG and controls: ** p<.01

Table 6. Performance of FG and control subjects (number and percent correct; values in

brackets correspond to S.D.) in calculation tasks

| Calculation tasks | FG | Controls |
|---|-----------|-----------------------|
| Non-rule-based single-digit calculation | | |
| - Additions (60) | 59 (98%) | 58.75 [1.25] (98%) |
| - Subtractions (45) | 45 (100%) | 44.5 [.5] (99%) |
| - Multiplications (81) | 77 (95%) | 80.5 [.06] (99%) |
| - Divisions (27) | 23 (85%) | 27 (100%) |
| Rule-based single-digit calculation | | |
| - $0 \div n = 0$ (9) | 0 (0%) | 8 [.17] (89%) *** |
| - $n \div n = 1$ (20) | 1 (5%) | 14.66 [.28] (73%) *** |
| - $n \ge 0$ (9) | 0 (0%) | 8.67 [.19] (96%) *** |
| - $0 \ge n = 0$ (9) | 0 (0%) | 9 (100%) *** |

Difference between FG and controls: *** p<.001