

## Appendices

### Appendix A: Performance of persons with aphasia on language and cognitive tests

| ID  | CNB   | BNT   | ANB   | Rep   | Noun PWM | Verb PWM | WPM   | Sent  | Ravens | Brixton | Digit- F | Digi-B |
|-----|-------|-------|-------|-------|----------|----------|-------|-------|--------|---------|----------|--------|
| NH  | 93.75 | 88.33 | 85.71 | 100.0 | 98.98    | 100.00   | 98.44 | 90.63 | 94.44  | 70.91   | 62.50    | 57.14  |
| Ebe | 82.81 | 38.33 | 78.57 | 81.25 | 94.90    | 96.88    | 100.0 | 75.00 | 66.67  | 47.27   | 50.00    | 28.57  |
| KA  | 84.38 | 61.67 | 77.55 | 96.25 | 95.92    | 93.75    | 100.0 | 78.13 | 77.78  | 65.45   | 87.50    | 42.86  |
| PBL | 34.38 | 15.00 | 36.73 | 38.75 | 94.90    | 96.88    | 100.0 | 71.88 | 97.22  | 80.00   | 37.50    | 0.00   |
| DL  | 78.13 | 76.67 | 95.92 | 85.00 | 98.98    | 100.00   | 100.0 | 100   | 94.44  | 74.55   | 62.5     | 42.86  |
| TK  | 15.63 | 08.33 | 45.92 | 35.00 | 85.71    | 96.88    | 100.0 | 87.50 | 69.44  | 54.55   | 37.50    | 42.86  |
| MH  | 06.25 | 05.00 | 27.55 | 13.75 | 78.57    | 84.38    | 100.0 | 59.38 | 80.56  | 74.55   | 25.00    | 28.57  |
| DCs | 67.19 | 43.33 | 89.80 | 72.50 | 100.00   | 100.00   | 100.0 | 93.75 | 100.0  | 81.82   | 62.50    | 57.14  |
| KS  | 31.25 | 13.33 | 70.41 | 93.75 | 75.51    | 65.63    | 71.88 | 84.38 | 86.11  | 52.73   | 100.0    | 57.14  |
| RH  | 3.13  | 01.67 | 36.73 | 21.25 | 94.90    | 100.00   | 96.88 | 62.50 | 83.33  | 61.82   | 25.00    | 28.57  |
| WE  | 78.13 | 55.00 | 71.43 | 71.25 | 95.92    | 93.75    | 100.0 | 84.38 | 91.67  | 70.91   | 62.5     | 42.86  |
| Gha | 87.50 | 78.33 | 79.59 | 91.25 | 96.94    | 100.00   | 95.31 | 93.75 | 83.33  | 69.09   | 50.00    | 42.86  |
| DF  | 87.50 | 50.00 | 84.69 | 93.75 | 89.80    | 87.50    | 100.0 | 62.50 | 88.89  | 43.64   | 37.50    | 28.57  |
| RL  | 84.38 | 63.33 | 82.65 | 61.25 | 97.96    | 96.88    | 96.88 | 62.50 | 80.56  | 72.73   | 62.50    | 57.14  |
| JBr | 93.75 | 85.00 | 86.73 | 97.50 | 98.98    | 100.00   | 100.0 | 96.88 | 97.22  | 67.27   | 75.00    | 71.43  |
| Ebo | 89.06 | 55.00 | 91.84 | 100.0 | 94.90    | 87.50    | 100.0 | 87.50 | 97.22  | 69.09   | 50.00    | 57.14  |
| WC  | 54.69 | 55.00 | 72.45 | 76.25 | 95.92    | 100.00   | 98.44 | 75.00 | 52.78  | 70.91   | 62.50    | 42.86  |
| BH  | 95.31 | 66.67 | 80.61 | 100.0 | 87.76    | 87.50    | 98.44 | 78.13 | 66.67  | 67.27   | 62.50    | 57.14  |
| JS  | 89.06 | 43.33 | 69.39 | 90.00 | 97.96    | 100.00   | 100.0 | 81.25 | 100.0  | 65.45   | 50.00    | 57.14  |
| AL  | 93.75 | 88.33 | 82.65 | 100.0 | 95.92    | 100.00   | 100.0 | 84.38 | 91.67  | 60.00   | 87.50    | 85.71  |
| MB  | 87.50 | 73.33 | 87.76 | 87.50 | 98.98    | 100.00   | 100.0 | 93.75 | 97.22  | 76.36   | 50.00    | 28.57  |
| DM  | 75.00 | 71.67 | 86.73 | 73.75 | 100.00   | 96.88    | 98.44 | 56.25 | 91.67  | 50.91   | 37.50    | 00.00  |
| PW  | 04.69 | 05.00 | 11.22 | 00.00 | 83.67    | 90.63    | 100.0 | 56.25 | 50.00  | 34.55   | 25.00    | 00.00  |
| JW  | 65.63 | 38.33 | 69.39 | 65.00 | 91.84    | 100.00   | 96.88 | 90.63 | 88.89  | 61.82   | 87.50    | 28.57  |
| Mad | 84.38 | 76.67 | 77.55 | 95.00 | 94.90    | 100.00   | 98.44 | 81.25 | 83.33  | 63.64   | 62.50    | 00.00  |
| RR  | 54.69 | 23.33 | 54.08 | 51.25 | 92.86    | 90.63    | 98.44 | 56.25 | 88.89  | 43.64   | 25.00    | 28.57  |
| AD  | 53.13 | 50.00 | 46.94 | 57.50 | 90.82    | 84.38    | 96.88 | 68.75 | 63.89  | 30.91   | 75.00    | 42.86  |
| KL  | 4.69  | 01.67 | 19.39 | 06.25 | 77.55    | 87.50    | 92.19 | 28.13 | 88.89  | 61.82   | 00.00    | 00.00  |
| GP  | 71.88 | 56.67 | 72.45 | 95.00 | 100.00   | 96.88    | 98.44 | 78.13 | 97.22  | 78.18   | 37.50    | 28.57  |
| JSc | 71.88 | 53.33 | 68.37 | 90.00 | 80.61    | 100.00   | 98.44 | 75.00 | 77.78  | 43.64   | 62.50    | 42.86  |
| AG  | 87.50 | 78.33 | 70.41 | 77.50 | 91.84    | 93.75    | 100.0 | 87.50 | 75.00  | 56.36   | 100.0    | 100.0  |
| DC  | 4.69  | 00.00 | 0.00  | 00.00 | 90.82    | 93.75    | 100.0 | 75.00 | 88.89  | 76.36   | 37.50    | 42.86  |
| CH  | 84.38 | 60.00 | 77.55 | 92.50 | 94.90    | 100.00   | 100.0 | 84.38 | 91.67  | 76.36   | 50.00    | 28.57  |
| AS  | 06.25 | 01.67 | 0.00  | 36.25 | 56.12    | 59.38    | 76.56 | 50.00 | 47.22  | 47.27   | 25.00    | 0.00   |
| MD  | 46.88 | 38.33 | 8.16  | 50.00 | 71.43    | 46.88    | 96.88 | 12.50 | 38.89  | 58.18   | 37.50    | 28.57  |
| AB  | 76.56 | 41.67 | 26.53 | 86.25 | 92.86    | 90.63    | 95.31 | 75.00 | 88.89  | 88.89   | 37.50    | 28.57  |
| PR  | 60.94 | 38.33 | 74.49 | 85.00 | 88.78    | 93.75    | 100.0 | 87.50 | 80.56  | 50.91   | 75.00    | 0.00   |
| GL  | 68.75 | 31.67 | 50.00 | 100.0 | 95.92    | 96.88    | 96.88 | 65.63 | 91.67  | 58.18   | 37.50    | 28.57  |
| DB  | 07.81 | 08.33 | 23.47 | 85.00 | 74.49    | 75.00    | 64.06 | 31.25 | 86.11  | 40.00   | 37.50    | 28.57  |
| JM  | 00.00 | 00.00 | 0.00  | 01.25 | 72.45    | 75.00    | 78.13 | 46.88 | 91.67  | 91.67   | 25.00    | 0.00   |
| DR  | 14.06 | 03.33 | 6.12  | 88.75 | 73.47    | 84.38    | 62.50 | 46.88 | 83.33  | 65.45   | 37.50    | 0.00   |
| Gho | 25.00 | 16.67 | 81.22 | 62.50 | 64.29    | 46.88    | 85.94 | 43.75 | 61.11  | 34.55   | 25.00    | 00.00  |
| JB  | 39.06 | 10.00 | 9.18  | 43.75 | 71.43    | 75.00    | 100   | 34.38 | 77.78  | 60.00   | 75.00    | 42.86  |

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| ID  | CNB   | BNT   | ANB   | Rep   | Noun<br>PWM | Verb<br>PWM | WPM   | Sent  | Ravens | Brixton | Digit- F | Digi-B |
|-----|-------|-------|-------|-------|-------------|-------------|-------|-------|--------|---------|----------|--------|
| PM  | 59.38 | 51.67 | 54.08 | 65.00 | 84.69       | 90.63       | 92.19 | 62.50 | 47.22  | 30.91   | 25.00    | 28.57  |
| CF  | 43.75 | 20.00 | 29.59 | 70.00 | 84.69       | 84.38       | 89.06 | 68.75 | 91.67  | 50.91   | 25.00    | 00.00  |
| DBb | 00.00 | 00.00 | 0.00  | 37.50 | 62.24       | 68.75       | 57.81 | 12.50 | 30.56  | 38.18   | 25.00    | 00.00  |

Scores are given as percentages.

**Abbreviations:** CNB = Cambridge Naming Battery (Bozeat et al., 2000); BNT = Boston Naming Test (Kaplan et al., 1983); ANB = action pictures from the Object and Action naming Battery (Druks & Masterson, 2000); Rep = immediate word repetition from the Psycholinguistic Assessments of Language Processing in Aphasia (Kay et al., 1992); Noun PWM = Noun picture-to-word matching (Alyahya et al., 2018b); Verb PWM = Verb picture-to-word matching (Alyahya et al., 2018a); WPM = spoken word-to-picture matching test from the Cambridge Semantic Battery (Bozeat et al., 2000); Sent = spoken sentence comprehension subtest from the Comprehensive Aphasia Test (Swinburn et al., 2005); Raven = Raven's Coloured Progressive Matrices (Raven, 1962); Brixton = Brixton Spatial Rule Anticipation Task (Burgess & Shallice, 1997); Digit F = forward digit span (Wechsler, 1987); Digit B = backward digit span (Wechsler, 1987).

**Appendix B: Target checklists used in the novel content word fluency index**

| Target words                                                             | Acceptable Inflections             | Acceptable synonyms and their inflections |
|--------------------------------------------------------------------------|------------------------------------|-------------------------------------------|
| <b>"Dinner Party" Storytelling Narrative (Fletcher &amp; Birt, 1983)</b> |                                    |                                           |
| Man                                                                      |                                    | Husband, Chap                             |
| Is                                                                       | Was                                |                                           |
| Phone                                                                    | Phones, Phoning                    | Ring, Rings, Ringing                      |
| Dinner                                                                   | Dinners                            |                                           |
| Prepare                                                                  | Prepares, Preparing, Prepared,     |                                           |
| Meal                                                                     | Meals                              | Food, Foods                               |
| Lady                                                                     |                                    | Wife, Women                               |
| Cook                                                                     | Cooks, Cooking, Cooked             |                                           |
| Wash                                                                     | Washes, Washing                    |                                           |
| Put                                                                      | Puts, Putting                      |                                           |
| Fish                                                                     | Fishes                             |                                           |
| Table                                                                    | Tables                             |                                           |
| Candle                                                                   | Candles                            |                                           |
| Cat                                                                      | Cats                               |                                           |
| Get                                                                      | Gets, Getting, Gotten              |                                           |
| Dress                                                                    | Dresses, Dressing, Dressed         |                                           |
| Are                                                                      | Were                               |                                           |
| Had                                                                      |                                    |                                           |
| Come                                                                     | Comes, Coming, Came                | Arrive, Arrives, Arriving, Arrived        |
| Have                                                                     | Has                                |                                           |
| Look                                                                     | Looks, Looking, Looked             |                                           |
| Go                                                                       | Goes, Going, Gone                  |                                           |
| Run                                                                      | Runs, Running, Ran                 | Dash, Dashes, Dashing, Dashed             |
| Chip                                                                     | Chips                              |                                           |
| Shop                                                                     | Shops                              |                                           |
| <b>"Cookie Theft" picture description (Goodglass &amp; Kaplan, 1983)</b> |                                    |                                           |
| Mother                                                                   |                                    | Mum, Lady, Woman                          |
| Is                                                                       | Was                                |                                           |
| Look                                                                     | Looks, Looking, Looked             |                                           |
| Wash                                                                     | Washes, Washing, Washed            |                                           |
| Sink                                                                     | Sinks                              |                                           |
| Overflow                                                                 | Overflows, Overflowing, Overflowed |                                           |
| Water                                                                    |                                    |                                           |
| Floor                                                                    |                                    |                                           |
| Children                                                                 |                                    | Kids                                      |
| Boy                                                                      |                                    |                                           |
| Stool                                                                    |                                    |                                           |
| Go                                                                       | Goes, Going, Gone                  |                                           |
| Fall                                                                     | Falls, Falling                     |                                           |
| Get                                                                      | Gets, Getting, Got                 |                                           |
| Cookie                                                                   | Cookies                            | Biscuit, Biscuits                         |
| Jar                                                                      |                                    |                                           |
| Girl                                                                     |                                    |                                           |