

Table 1: results of speech analysis and cognitive testing

variable	patient		control		p
	mean ^b	range	mean ^b	range	
<u>general</u>					
sex	-	6F, 9M	-	7F, 8M	-
age at onset (yrs)	67	56.9 - 81.7	-	-	-
age at testing (yrs)	70.7	60.3 - 84.3	71.5	58.6 - 88.4	> 0.1 ^g
duration of illness (yrs)	3.7	1.6 - 6.9	-	-	-
words analysed	1001	130 - 1889	1522	1088 - 2640	-
<u>speech</u>					
speech rate (words / min)	93.2	29.6 - 145.5	153.9	113.4 - 202.3	2x10⁻⁶
phrase length (words / SU)	3.7	1.3 - 4.8	5.2	4.2 - 6.2	2x10⁻⁵
subordinate clauses (per SU)^d	4.9%	0% - 17.9%	20.7%	12% - 31%	4x10⁻⁵
passive constructions (per SU)	0.4%^a	0% - 1.1%	1.9%^a	0% - 5.3%	1x10⁻⁵ ^f
embedded constructions (per SU)	0.0%^a	0% - 1.6%	1.1%^a	0% - 2.3%	2x10⁻⁴ ^f
verb arguments (per verb token)	1.39	0.89 - 1.58	1.45	1.33 - 1.60	> 0.1
inflected verbs (per verb token)	63.1%	33.3% - 80%	67.4%	49% - 81%	> 0.1
contracted forms (per word)	5.4%	0% - 8.9%	4.5%	2.7% - 7.0%	> 0.1
modifier phrases (per SU) ^d	12.1%	1.5% - 39.2%	12.8%	6.8% - 23.8%	0.41
elliptical phrases (per SU)^d	6.8%	1.2% - 42.2%	2.8%	0.4% - 10.7%	0.01
open-class words (per word)	41.9%	33.9% - 60.7%	45.9%	44% - 50%	0.042 ^g
noun-verb ratio ^c	0.74	0.27 - 2.71	0.97	0.69 - 1.36	> 0.1 ^g
phonemic errors (per word)^d	4.6%	0.3% - 28%	0.4%	0.2% - 1.1%	3x10⁻⁷
grammatical errors (per SU)^d	17.6%	6.8% - 46.3%	3.2%	1.8% - 5.2%	1x10⁻⁸
closed-class word errors (per cc. word)	0.38%^a	0% - 2.8%	0.13%^a	0% - 0.5%	0.004^f
semantic errors (per open-class word)	0.55%^a	0% - 1.4%	0.00%^a	0% - 0.3%	5x10⁻⁴ ^f
<u>cognitive testing</u>					
Wisconsin card sort test (max 6)	2^a	0 - 6	6^a	3 - 6	7x10⁻⁶ ^f
Graded Naming (max 30)	9.2	0 - 23	24.1	20 - 27	2x10⁻⁷
TROG (max 28, chance 7)	18^a	7 - 28	28^a	25 - 28	5x10⁻⁷ ^f
Camel and Cactus test (max 64, chance 16)	49.9	35 - 59	59.0^e	51 - 62^e	4x10⁻⁴
word-picture matching (max 64, chance 6)	62^a	57 - 64	64^a	63 - 64^e	9x10⁻⁶ ^f
VOSP position discrim'n (max 20, chance 10)	19 ^a	14 - 20	20 ^a	17 - 20	0.049 ^f

Table 1: legend

Bold type highlights variables for which patients and controls are shown to differ significantly, using a corrected alpha of 0.01. 1-tailed *t*-tests are used except where indicated.

a : median quoted instead of mean

b : for transformed variables, the back-transformed mean is given

c : log-transformed before analysis

d : logit-transformed before analysis

e : derived from data outside this study

f : 1-tailed Mann-Whitney *U* test instead of 1-tailed *t*-test

g : 2-tailed instead of 1-tailed *t*-test

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Table 2: correlations between the most significant variables

	speech rate									
phrase length	0.79	phrase length								
subord. phrases	0.39	0.64	subord. phrases							
elliptical phrases	0.80	0.89	0.45	elliptical phrases						
phonemic errors	0.60	0.66	0.32	0.85	phonemic errors					
grammat. errors	0.45	0.42	0.23	0.60	0.85	grammat. errors				
Graded Naming	-0.24	0.14	0.41	-0.04	-0.2	-0.39	Graded Naming			
TROG	-0.11	0.01	0.15	-0.16	-0.3	-0.36	0.54	TROG		
WCST	<i>-0.02</i>	<i>0.11</i>	<i>0.08</i>	<i>-0.08</i>	<i>0.08</i>	<i>0.08</i>	<i>-0.14</i>	<i>0.20</i>	WCST	
Camel & Cactus	-0.10	-0.07	-0.06	-0.15	-0.10	-0.15	0.35	0.60	<i>0.53</i>	Camel & Cactus
WPMT	<i>-0.21</i>	<i>0.01</i>	<i>-0.03</i>	<i>-0.23</i>	<i>-0.15</i>	<i>-0.15</i>	<i>0.36</i>	<i>0.53</i>	<i>0.25</i>	<i>0.58</i>

Table 2: legend

For this purpose, the sign of the scores on each test was changed to ensure that a more positive score indicated performance closer to controls. A positive correlation between two tests therefore indicates that patients who are impaired on one tend also to be impaired on the other.

Italics indicate a correlation calculated using Kendall's tau rather than Pearson's *r*.

Bold face highlights correlations which remain significant after Bonferroni correction of the associated p-value.