

## Means and standard deviations for the FTLD Module v3.0 neuropsychological battery in cognitively normal participants

AS OF MARCH 2018

**Table 1. FTLD neuropsychological battery summary statistics for clinically cognitive normal UDS participants with FTLD Module**

AS OF MARCH 2018

TEST	n	Mean (SD)	Q25	Median	Q75	Range
Benson Complex Figure — Immediate	197	15.7 (1.7)	15	16	17	1–17
Benson Complex Figure — Delayed	197	12.3 (3.0)	10	12	14	0–17
Verbal Fluency: Phonemic Test — Total correct F/L words	200	28.9 (9.0)	23	29	36	6–57
Word Reading Test — Total regular words	318	15.0 (0.1)	15	15	15	14–15
Word Reading Test — Total irregular words	318	14.5 (0.9)	14	15	15	8–15
Semantic Word–picture Matching Test — Total correct	323	20.0 (0.2)	20	20	20	19–20
Semantic Associates Test — Total correct	324	16.0 (0.2)	16	16	16	15–16
Northwestern Anagram Test — Total score	311	9.3 (1.3)	9	10	10	4–10
Sentence Repetition Test — Total accurate sentences	316	4.4 (0.7)	4	5	5	0–5
Noun & Verb Naming Subtest — Total nouns	320	15.9 (0.7)	16	16	16	5–16
Noun & Verb Naming Subtest — Total verbs	320	15.8 (1.0)	16	16	16	0–16
Noun & Verb Naming Subtest — Noun/verb ratio	319	1.0 (0.0)	1	1	1	0.9–1.1
Sentence Reading Test — Total accurate sentences	315	4.8 (0.5)	5	5	5	2–5

**CRITERIA** — Subjects have: 1) completed at least one FTLD Module; 2) a clinical diagnosis of normal cognition; 3) global CDR=0. NOTE: Includes only the first available visit meeting criteria in items 1–3.

**Table 2. FTLD neuropsychological battery scores by age, among clinically cognitive normal UDS participants**

AS OF MARCH 2018

TEST	Age: < 65 yrs						Age: ≥ 65 yrs					
	n	Mean	SD	Cutpoints			n	Mean	SD	Cutpoints		
				-1SD	-1.5SD	-2SD				-1SD	-1.5SD	-2SD
Benson Complex Figure — Immediate	110	15.7	2.1	13.6	12.6	11.6	87	15.6	1.2	14.4	13.8	13.2
Benson Complex Figure — Delayed	110	13.1	2.7	10.4	9.0	7.6	87	11.3	3.1	8.2	6.6	5.1
Verbal Fluency: Phonemic Test — Total correct F/L words	115	29.0	8.9	20.2	15.8	11.3	85	28.6	9.3	19.3	14.7	10.1
Word Reading Test — Total regular words	214	15.0	0.1	14.9	14.9	14.9	104	15.0	0.2	14.7	14.6	14.5
Word Reading Test — Total irregular words	214	14.5	0.9	13.5	13.1	12.6	104	14.6	0.8	13.8	13.4	13.0
Semantic Word–picture Matching Test — Total correct	216	20.0	0.1	19.9	19.8	19.8	107	19.9	0.3	19.6	19.5	19.4
Semantic Associates Test — Total correct	216	16.0	0.2	15.8	15.7	15.6	108	15.9	0.2	15.7	15.6	15.5
Northwestern Anagram Test — Total score	206	9.4	1.2	8.1	7.5	6.9	105	9.1	1.4	7.7	7.1	6.4
Sentence Repetition Test — Total accurate sentences	212	4.5	0.7	3.7	3.4	3.0	104	4.4	0.8	3.6	3.2	2.8
Noun & Verb Naming Subtest — Total nouns	214	15.9	0.8	15.1	14.8	14.4	106	15.8	0.5	15.4	15.1	14.9
Noun & Verb Naming Subtest — Total verbs	214	15.8	1.1	14.7	14.1	13.6	106	15.8	0.5	15.4	15.1	14.9
Noun & Verb Naming Subtest — Noun/verb ratio	213	1.0	0.0	1.0	1.0	1.0	106	1.0	0.0	1.0	0.9	0.9
Sentence Reading Test — Total accurate sentences	211	4.8	0.5	4.4	4.1	3.9	104	4.8	0.5	4.3	4.1	3.8

**CRITERIA** — Subjects have: 1) completed at least one FTLD Module; 2) a clinical diagnosis of normal cognition; 3) global CDR=0. NOTE: Includes only the first available visit meeting criteria in items 1–3.

**Table 3. FTLD neuropsychological battery scores by sex and age, among clinically cognitive normal UDS participants**

AS OF MARCH 2018

TEST	MALE											
	Age: < 65 yrs						Age: ≥ 65 yrs					
	n	Mean	SD	Cutpoints			n	Mean	SD	Cutpoints		
-1SD				-1.5SD	-2SD	-1SD				-1.5SD	-2SD	
Benson Complex Figure — Immediate	47	15.5	2.6	12.9	11.6	10.3	42	15.6	1.4	14.3	13.6	12.9
Benson Complex Figure — Delayed	47	13.3	2.8	10.5	9.2	7.8	42	11.3	3.1	8.2	6.7	5.1
Verbal Fluency: Phonemic Test — Total correct F/L words	54	29.8	9.0	20.8	16.3	11.8	42	28.2	9.8	18.4	13.5	8.6
Word Reading Test — Total regular words	94	15.0	0.0	15.0	15.0	15.0	51	14.9	0.3	14.7	14.5	14.4
Word Reading Test — Total irregular words	94	14.5	0.8	13.7	13.2	12.8	51	14.5	0.9	13.7	13.2	12.8
Semantic Word–picture Matching Test — Total correct	94	20.0	0.0	20.0	20.0	20.0	52	19.9	0.3	19.6	19.4	19.2
Semantic Associates Test — Total correct	94	16.0	0.1	15.8	15.8	15.7	53	15.9	0.2	15.7	15.6	15.5
Northwestern Anagram Test — Total score	89	9.2	1.4	7.8	7.1	6.4	50	9.2	1.2	7.9	7.3	6.7
Sentence Repetition Test — Total accurate sentences	94	4.5	0.7	3.8	3.5	3.1	51	4.4	0.9	3.5	3.1	2.6
Noun & Verb Naming Subtest — Total nouns	94	15.8	1.1	14.7	14.1	13.5	52	15.8	0.6	15.2	15.0	14.7
Noun & Verb Naming Subtest — Total verbs	94	15.8	1.7	14.1	13.2	12.4	52	15.8	0.5	15.3	15.0	14.8
Noun & Verb Naming Subtest — Noun/verb ratio	93	1.0	0.0	1.0	1.0	1.0	52	1.0	0.0	1.0	0.9	0.9
Sentence Reading Test — Total accurate sentences	93	4.8	0.5	4.3	4.0	3.8	51	4.9	0.4	4.5	4.3	4.1
TEST	FEMALE											
	Age: < 65 yrs						Age: ≥ 65 yrs					
	n	Mean	SD	Cutpoints			n	Mean	SD	Cutpoints		
-1SD				-1.5SD	-2SD	-1SD				-1.5SD	-2SD	
Benson Complex Figure — Immediate	63	15.9	1.6	14.3	13.5	12.7	45	15.6	1.1	14.6	14.0	13.5
Benson Complex Figure — Delayed	63	13.0	2.7	10.2	8.9	7.5	45	11.2	3.1	8.1	6.5	5.0
Verbal Fluency: Phonemic Test — Total correct F/L words	61	28.3	8.7	19.6	15.3	10.9	43	29.0	8.9	20.1	15.7	11.3
Word Reading Test — Total regular words	120	15.0	0.1	14.9	14.9	14.8	53	15.0	0.1	14.8	14.8	14.7
Word Reading Test — Total irregular words	120	14.5	1.0	13.4	12.9	12.4	53	14.7	0.8	13.9	13.5	13.1
Semantic Word–picture Matching Test — Total correct	122	20.0	0.1	19.9	19.8	19.7	55	19.9	0.2	19.7	19.6	19.5
Semantic Associates Test — Total correct	122	16.0	0.2	15.7	15.6	15.5	55	15.9	0.2	15.7	15.6	15.5
Northwestern Anagram Test — Total score	117	9.5	1.1	8.4	7.9	7.3	55	9.1	1.5	7.6	6.8	6.1
Sentence Repetition Test — Total accurate sentences	118	4.4	0.7	3.7	3.3	3.0	53	4.4	0.7	3.7	3.3	3.0
Noun & Verb Naming Subtest — Total nouns	120	16.0	0.2	15.8	15.7	15.7	54	15.9	0.4	15.5	15.3	15.1
Noun & Verb Naming Subtest — Total verbs	120	15.9	0.3	15.6	15.4	15.3	54	15.8	0.4	15.4	15.2	15.0
Noun & Verb Naming Subtest — Noun/verb ratio	120	1.0	0.0	1.0	1.0	1.0	54	1.0	0.0	1.0	1.0	0.9
Sentence Reading Test — Total accurate sentences	118	4.8	0.4	4.4	4.2	4.0	53	4.7	0.6	4.2	3.9	3.6

**CRITERIA** — Subjects have: 1) completed at least one FTLD Module; 2) a clinical diagnosis of normal cognition; 3) global CDR=0. NOTE: Includes only the first available visit meeting criteria in items 1–3.

**Table 4. FTLD neuropsychological battery scores by education and age, among clinically cognitive normal UDS participants**

AS OF MARCH 2018

TEST	EDUCATION: ≤ 12 yrs											
	Age: < 65 yrs						Age: ≥ 65 yrs					
	n	Mean	SD	Cutpoints			n	Mean	SD	Cutpoints		
-1SD				-1.5SD	-2SD	-1SD				-1.5SD	-2SD	
Benson Complex Figure — Immediate	20	15.0	3.7	11.3	9.4	7.6	16	15.4	1.2	14.2	13.6	13.0
Benson Complex Figure — Delayed	20	12.7	3.2	9.5	8.0	6.4	16	11.0	2.7	8.3	7.0	5.7
Verbal Fluency: Phonemic Test — Total correct F/L words	21	25.0	8.4	16.6	12.4	8.2	15	27.1	10.6	16.5	11.2	5.9
Word Reading Test — Total regular words	35	15.0	0.0	15.0	15.0	15.0	16	14.9	0.3	14.7	14.6	14.4
Word Reading Test — Total irregular words	35	14.2	0.9	13.2	12.8	12.3	16	14.1	1.3	12.9	12.2	11.6
Semantic Word–picture Matching Test — Total correct	35	20.0	0.0	20.0	20.0	20.0	17	19.9	0.3	19.6	19.4	19.2
Semantic Associates Test — Total correct	35	16.0	0.2	15.8	15.7	15.6	17	16.0	0.0	16.0	16.0	16.0
Northwestern Anagram Test — Total score	34	9.1	1.3	7.8	7.2	6.5	16	9.0	1.4	7.6	7.0	6.3
Sentence Repetition Test — Total accurate sentences	35	4.4	0.9	3.5	3.0	2.6	15	4.3	0.9	3.4	2.9	2.5
Noun & Verb Naming Subtest — Total nouns	35	15.7	1.9	13.8	12.9	12.0	17	15.9	0.3	15.6	15.4	15.2
Noun & Verb Naming Subtest — Total verbs	35	15.4	2.7	12.7	11.3	10.0	17	15.7	0.6	15.1	14.8	14.5
Noun & Verb Naming Subtest — Noun/verb ratio	34	1.0	0.0	1.0	1.0	0.9	17	1.0	0.0	1.0	1.0	0.9
Sentence Reading Test — Total accurate sentences	35	4.7	0.6	4.1	3.8	3.5	15	4.5	0.7	3.8	3.4	3.0
TEST	EDUCATION: > 12 yrs											
	Age: < 65 yrs						Age: ≥ 65 yrs					
	n	Mean	SD	Cutpoints			n	Mean	SD	Cutpoints		
-1SD				-1.5SD	-2SD	-1SD				-1.5SD	-2SD	
Benson Complex Figure — Immediate	89	15.9	1.5	14.4	13.7	12.9	70	15.7	1.2	14.4	13.8	13.2
Benson Complex Figure — Delayed	89	13.2	2.6	10.6	9.3	8.0	70	11.3	3.2	8.1	6.5	4.9
Verbal Fluency: Phonemic Test — Total correct F/L words	93	30.1	8.7	21.4	17.1	12.8	69	28.9	9.1	19.8	15.3	10.7
Word Reading Test — Total regular words	165	15.0	0.1	14.9	14.9	14.8	86	15.0	0.2	14.7	14.6	14.5
Word Reading Test — Total irregular words	165	14.5	0.9	13.6	13.1	12.7	86	14.7	0.7	14.0	13.7	13.3
Semantic Word–picture Matching Test — Total correct	167	20.0	0.1	19.9	19.8	19.8	88	19.9	0.3	19.6	19.5	19.4
Semantic Associates Test — Total correct	167	16.0	0.2	15.8	15.7	15.6	89	15.9	0.3	15.7	15.6	15.4
Northwestern Anagram Test — Total score	159	9.4	1.2	8.2	7.6	7.0	87	9.1	1.4	7.7	7.0	6.4
Sentence Repetition Test — Total accurate sentences	163	4.5	0.6	3.9	3.5	3.2	87	4.4	0.8	3.6	3.2	2.8
Noun & Verb Naming Subtest — Total nouns	165	16.0	0.2	15.8	15.7	15.6	87	15.8	0.5	15.3	15.1	14.8
Noun & Verb Naming Subtest — Total verbs	165	15.9	0.3	15.7	15.5	15.4	87	15.8	0.4	15.4	15.2	15.0
Noun & Verb Naming Subtest — Noun/verb ratio	165	1.0	0.0	1.0	1.0	1.0	87	1.0	0.0	1.0	0.9	0.9
Sentence Reading Test — Total accurate sentences	162	4.9	0.4	4.4	4.2	4.0	87	4.8	0.4	4.4	4.2	4.0

**CRITERIA** — Subjects have: 1) completed at least one FTLD Module; 2) a clinical diagnosis of normal cognition; 3) global CDR=0. NOTE: Includes only the first available visit meeting criteria in items 1–3.