

TALSA Scoring Manual: Digit / Word Span – Closed Set

Test Description:

The Digit/Word Span – Closed Set is a test of verbal short-term memory span for digits and words. It is assessed using a nonverbal pointing task and a verbal repetition task to determine if task differences affect verbal span capacity. Span scores provide a measure of verbal short-term memory (STM) capacity.

Test Variations:

1. Word Span - Closed set - Pointing task - mixed lengths (2, 3 & 4 words) consisting of 6 trials each.
2. Word Span - Closed set - Repetition task - mixed lengths (2, 3 & 4 words) consisting of 6 trials each.
3. Digit Span - Closed set – Pointing task - mixed lengths (2, 3 & 4) consisting of 6 trials each.
4. Digit Span - Closed set - Repetition task - mixed lengths (2, 3 & 4) consisting of 6 trials each.

Scoring each Question

Scoring is done on a 3-point scale as follows:

- 1 – Wrong answer
- 2 – This subtest does not allow for partially correct responses.
- 3 – Correct answer

Termination of test: When a patient/client scores **fewer than 3 correct** on a list length the test is terminated. However, be sure to score all the items on subsequent list lengths as “1”, not zero.

Scoring the Subtest

A span score consists of the number of the first list length (LL) *passed* and partial credit for correctly completed items in the first LL *failed*. Determine partial credit for items on first LL failed using the table below (X stands for the last LL passed).

Number of last LL <i>passed</i>	Number of items correct on first LL <i>failed</i>	Credit for correct items on first LL <i>failed</i>	Span score
X	0	.00	X.00
X	1	.33	X.33
X	2	.66	X.66
X	3	N/A - passed	
X	4	N/A - passed	
X	5	N/A - passed	
X	6	N/A - passed	

Span score examples:

3.33 - The patient passed LL3 (with 4, 5 or 6 items correct) and, although they failed LL4, they correctly completed 1 of the items in LL4.

3.66 - The patient passed LL3 (with 4, 5 or 6 items correct) and, although they failed LL4, they correctly completed 2 of the items in LL4.

2.00 - The patient passed LL2 (with 4, 5 or 6 items correct) but did not correctly complete any items in LL3.

Word Pointing and Word Repetition: Span scores below 4.0 may be considered impaired. On the research version of the TALSA neurotypical control participants had a mean span score of 5.60 on both Word Pointing and Word Repetition with a standard deviation (SD) of 0.81 (Word Pointing) and 1.18 (Word Repetition). A score that falls one SD below the mean of neurotypical controls may be considered impaired.

Digit Pointing and Digit Repetition: span scores below 4.0 may be considered impaired. On the research version of the TALSA neurotypical control participants had a mean span score of 6.69 on both Digit Pointing and Digit Repetition with a standard deviation (SD) of 0.66 (Word Pointing) and 0.62 (Word Repetition). A score that falls one SD below the mean of neurotypical controls may be considered impaired.

Note: T-scores are currently not available for this test.

SCORE SHEET: Digit/Word Span-Closed Set 1 points = wrong, 3 points = correct

Termination of test: When a patient/client scores **fewer than 3 correct** on a list length the test is terminated. However, be sure to score all the items on subsequent list lengths as “1”, not zero.

14.1 Digit Span - Closed set - Pointing			
#	ITEMS - list length 2	Points	Comments
1	5 1		
2	4 6		
3	9 3		
4	7 8		
5	2 6		
6	8 5		
ITEMS – list length 3			
1	4 1 3		
2	2 7 9		
3	3 2 6		
4	1 6 7		
5	6 9 7		
6	8 3 5		
ITEMS – list length 4			
1	5 1 9 8		
2	4 8 1 2		
3	3 9 8 5		
4	8 5 3 7		
5	4 6 5 8		
6	9 1 5 6		

Span score: _____.

14.2 Digit Span - Closed set - Repetition			
#	ITEMS - list length 2	Points	Comments
1	5 1		
2	4 6		
3	9 3		
4	7 8		
5	2 6		
6	8 5		
ITEMS – list length 3			
1	4 1 3		
2	2 7 9		
3	3 2 6		
4	1 6 7		
5	6 9 7		
6	8 3 5		
ITEMS – list length 4			
1	5 1 9 8		
2	4 8 1 2		
3	3 9 8 5		
4	8 5 3 7		
5	4 6 5 8		
6	9 1 5 6		

Span score: _____.

14.3 Word Span - Closed set - Pointing			
#	ITEMS - list length 2	Points	Comments
1	tree sun		
2	book door		
3	apple ring		
4	door chair		
5	chair book		
6	knife cat		
	ITEMS – list length 3		
1	cat apple book		
2	ring tree door		
3	door ring chair		
4	apple knife ring		
5	chair cat apple		
6	tree book sun		
	ITEMS – list length 4		
1	knife cat ring apple		
2	ring door cat chair		
3	cat tree apple door		
4	door book knife cat		
5	tree sun book ring		
6	chair apple sun knife		

Span score: _____._____

14.4 Word Span - Closed set - Repetition			
#	ITEMS - list length 2	Points	Comments
1	tree sun		
2	book door		
3	apple ring		
4	door chair		
5	chair book		
6	knife cat		
	ITEMS – list length 3		
1	cat apple book		
2	ring tree door		
3	door ring chair		
4	apple knife ring		
5	chair cat apple		
6	tree book sun		
	ITEMS – list length 4		
1	knife cat ring apple		
2	ring door cat chair		
3	cat tree apple door		
4	door book knife cat		
5	tree sun book ring		
6	chair apple sun knife		

Span score: _____._____