### **TALSA Scoring Manual: Sentence Repetition v1.0**

#### **Test Description:**

Sentence repetition is a test of the effects of increased memory load on accuracy of sentence repetition. Memory load is increased by adding two additional content words to create the padded version of the sentences. The use of one and five second intervals between the stimulus and the response assesses verbal short-term and working memory.

#### **Test Variations:**

- 1. Unpadded 1 second interval consisting of **8** items.
- 2. Unpadded 5 second interval consisting of **8** items.
- 3. Padded 1 second interval consisting of **8** items.
- 4. Padded 1 second interval consisting of **8** items.

### **Scoring each Question**

- 1 Wrong answer
- 2 Partially met criteria. Partial credit is allowed for either or both of the following reasons:
   1) The response contains all the **bolded** words, without any additional content words, but they are <u>out</u> <u>of order</u> and/or...

2) The patient responds early (i.e., *before* the 1 second or 5 second response cue) or late (i.e., more than 5 seconds *after* the response cue). Indicate the reason(s) in the comment section.

**3** – Correct answer. A correct answer includes all bolded (content) words, with no additional content words, produced in order. Unbolded words do not contribute to the score.

#### Scoring the Subtest

- 1. <u>Calculate the total raw score</u>: Add up the point values for each item. For any 8-item form, the lowest possible raw score is 8; the highest possible raw score is 24. For the 12 item forms, the lowest possible raw score is 12; the highest possible raw score is 36.
- <u>Determine the T-score</u>: Use the appropriate cross-walk table to determine the T-score. The T-score rescales the raw score into a standardized score with a mean of 50 and a standard deviation (SD) of 10. The standardized T-score is reported as the final score for each participant. The 95% confidence interval can be determined as T-score <u>+</u> (1.96\*SE).

<u>Note:</u> All questions on the form must be answered in order to produce the most valid summed score. However, if a respondent answers at least 50% of the items (e.g. 4 items for any of the 8 item tests) the following algorithm can be used to derive a score. For these pro-rated raw scores, use caution when interpreting the final pro-rated T-score.

Pro-rated raw summed score = <u>(Sum of the item responses answered)</u> \* <u>(number of items on the form)</u> (number of items actually answered)

If the result is a fraction, round up to the nearest whole number. Example: The patient answered only 6 items on an 8 item subtest and received a raw score of 13.

 $\frac{13 \times 8}{6} = 17.3 \rightarrow \text{ so round to } 17$ 

The T-score calculation is based on 171 subjects who completed 1 or more TALSA sub-tests between 2008 - 2019. These subjects consisted of both neurotypical controls (n=36) and subjects with aphasia (n=135). The inclusion of both neurotypical controls and adults with various levels of aphasia support measuring change across the spectrum of capabilities.

# Scoresheet – Sentence Repetition

			-		
	ITEMS	Points	Comments		
1	The man crosses the street at the corner.				
2	The girl is planting a flower near the bushes.				
3	The farmer plows the field in the morning.				
4	The <b>boy washed</b> the <b>car in</b> the <b>driveway.</b>				
5	The man climbs the mountain in the rain.				
6	The <b>boy</b> is <b>walking</b> the <b>dog in</b> the <b>park.</b>				
7	The cat chased the ball down the hallway.				
8	The woman carries the box to the store.				
	RAW TOTAL		T-Score		
	9.2 Sentence Repetition – Unpadded – 5 sec.				
	ITEMS	Points			
1	The <b>boy</b> is <b>peeling</b> the <b>banana for</b> the <b>cereal.</b>				
	The elephant smashed the cage with his foot.				
2	-				
2 3	The man irons the shirt before the party.				
3	The man irons the shirt before the party.				
3	The man irons the shirt before the party. The girl is mixing the batter with a spoon.				
3 4 5	The man irons the shirt before the party.         The girl is mixing the batter with a spoon.         The man dusts the shelf with a cloth.				
3 4 5 6	The man irons the shirt before the party.         The girl is mixing the batter with a spoon.         The man dusts the shelf with a cloth.         The mechanic changes the tire beside the road.				

	9.3 Sentence Repetition Padded 1 sec.			
	ITEMS		Points	
1	The brave man climbs the mountain in the pouring rain.			
2	The cat chased the little ball down the long hallway.			
3	The farmer plows the muddy field in the early morning.			
4	The little girl is planting a flower near the thorny bushes.			
5	The nice boy washed the dirty car in the driveway.			
6	The old man crosses the street at the busy corner.			
7	The <b>boy</b> is <b>walking</b> the <b>shaggy dog in</b> the <b>public park.</b>			
8	The young woman carries the heavy box to the store.			
		RAW TOTAL		T-Score
	9.4 Sentence Repetition Padded 5 sec.			
	Items		Points	
1	The clumsy woman drops the fancy cup on the floor.			
2	The angry elephant smashed the cage with his huge foot.			
3	The girl is mixing the sticky batter with a small spoon.			
4	The greasy mechanic changes the flat tire beside the road.			
5	The man dusts the filthy shelf with a soft cloth.			
6	The girl is knitting a fuzzy sweater for the cold winter.			
7	The sleepy boy is peeling the banana for the cold cereal.			
8	The young man irons the shirt before the big party.			

# Scoring Cross-walk Tables

9.1 Sentence Repetition 1 Sec. Unpadded			
8-item Form: Sum Score to T-Score Conversion Table			
Raw summed	T-Score	Standard	Severity
score		Error (SE)	
8	35	1.4	
9	37	1.4	Course
10	39	1.2	Severe
11	40	1.2	
12	42	1.2	
13	44	1.2	Mod
14	45	1	IVIOU
15	46	1	
16	48	1	
17	50	1	Mild
18	52	1.2	IVIIIU
19	54	1.2	
20	55	1.2	
21	56	1.2	
22	58	1.2	WNL
23	60	1.4	
24	61	1.4	

9.2 Sentence Repetition 5 Sec. Unpadded				
8-item Form: Su	8-item Form: Sum Score to T-Score Conversion Table			
Raw summed	T-Score	Severity		
score		Error (SE)		
8	37	1.4		
9	39	1.4	Severe	
10	40	1.2		
11	41	1.2		
12	43	1.2	Mod	
13	45	1.2	IVIOU	
14	47	1		
15	48	1		
16	50	1		
17	52	1	Mild	
18	53	1.2		
19	54	1.2		
20	56	1.2		
21	58	1.2		
22	60	1.2	WNL	
23	62	1.4		
24	63	1.4		

9.3 Sentence Repetition 1 Sec. Padded				
8-item Form: Su	8-item Form: Sum Score to T-Score Conversion Table			
Raw summed	T-Score	Standard	Severity	
score		Error (SE)		
8	40	.9	Severe	
9	41	.9		
10	43	1	Mod	
11	45	1	IVIOU	
12	47	1		
13	49	1.1		
14	50	1.1	Mild	
15	52	1.1	Mild	
16	54	1.1		
17	56	1.1		
18	57	1.1		
19	59	1.1		
20	61	1	WNL	
21	63	1		
22	65	1		
23	66	.9		
24	68	.9		

9.4 Sentence Repetition 5 Sec. Padded			
8-item Form: Sum Score to T-Score Conversion Table			
Raw summed	T-Score	Standard	Severity
score		Error (SE)	
8	41	.9	
9	43	.9	Mod
10	45	1	IVIOU
11	47	1	
12	49	1	
13	51	1.1	Mild
14	53	1.1	
15	55	1.1	
16	56	1.1	
17	58	1.1	
18	60	1.1	
19	62	1.1	\A/NII
20	64	1	WNL
21	66	1	
22	68	1	
23	70	.9	
24	72	.9	