

# TALSA Scoring Manual: Rhyming Triplets

## Test Description:

Rhyming Triplets is a test of verbal working memory that primarily taps into phonological working memory. It assesses the ability to make rhyming judgments under low (2 word pairs) and high (3 word pairs) working memory conditions.

\*\* Important note: In order to determine the effect of increased WM load on language, it is necessary to administer both the 3 word pair condition and the 2 word pair condition. The critical outcome measurement is the difference between these two scores. The greater the difference, the greater the WM impairment.

\*\* Learning effect: The items are the same on the 2 word and the 3 word conditions. To minimize the learning effect, do not administer both versions back to back. Insert another test or activity in between or administer on different days.

## Test Variations:

1. 2 word pairs (with box) consisting of **8** items
2. 3 word pairs (without box) consisting of **8** items

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## Scoring each Question

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

- 1 – Wrong answer
- 2 – Partially met criteria: For this subtest there is no option for partial credit.
- 3 – Correct answer

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## Scoring the Subtest

1. Calculate the total raw score: 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.
2. Determine the T-score: 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  $T\text{-score} \pm (1.96 * SE)$ .

Note: 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 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.

$$\text{Pro-rated raw summed score} = \frac{(\text{Sum of the item responses answered}) * (\text{number of items on the form})}{(\text{number of items actually answered})}$$

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.*

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

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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.

Response pattern scoring: TALSA instruments can also be scored using item-level calibrations referred to as "response pattern scoring" which provides a more accurate score as it is based on the actual pattern of the respondent's answers (so based on exactly which items were correct or not). The TALSA investigators would be glad to support this if you contact us.

**SCORE SHEET: Rhyming Triplets [ Wrong = 1 point, Partially Correct = N/A, Correct = 3 points]**

10.1 Rhyming Triplets 2 Word Pair					
	Target 1	Target 2 (BOX)	Target 3	Points	Comments
prac	vase	mouse	house		
prac	well	bell	hen		
1	cross	crane	brain		
2	trunk	skunk	skirt		
3	flint	quint	plant		
4	fern	corn	horn		
5	steam	cream	plum		
6	dots	pond	wand		
7	sword	board	belt		
8	vent	tent	desk		
<b>RAW TOTAL (sum points)</b>					
<b>T-Score (from crosswalk table)</b>					<b>Standard Error (from table)</b>

10.2 Rhyming Triplets 3 Word Pair					
#	Target 1	Target 2	Target 3	Points	Comments
prac	mouse	vase	house		
prac	hen	well	bell		
1	cream	steam	plum		
2	horn	fern	corn		
3	plant	flint	quint		
4	wand	dots	pond		
5	skunk	trunk	skirt		
6	cross	brain	crane		
7	tent	vent	desk		
8	sword	belt	board		
<b>RAW TOTAL (sum points)</b>					
<b>T-Score (from crosswalk table)</b>					<b>Standard Error (from table)</b>

Difference Score	
<i>The greater the difference, the greater the WM impairment.</i>	
2 word pair score	
3 word pair score	
<b>Difference</b>	

## Scoring Crosswalk Tables [raw scores to T-scores]

10.1 Rhyming Triplets 2 Word Pair			
8-item Form: Raw Score to T-Score Conversion Table			
Raw summed score	T-Score	Standard Error (SE)	Severity
8	20	5	Severe
9	20	5	
10	20	5	
11	20	5	
12	20	3	
13	20	3	
14	25	3	
15	25	3	
16	33	.95	
17	36	.95	
18	39	.95	
19	42	.95	Moderate
20	45	.95	
21	48	.95	Mild
22	51	.95	
23	54	.95	
24	57	.95	WNL

10.2 Rhyming Triplets 3 Word Pair			
8-item Form: Raw Score to T-Score Conversion Table			
Raw summed score	T-Score	Standard Error (SE)	Severity
8	20	5	Severe
9	20	5	
10	20	5	
11	20	5	
12	20	3	
13	20	3	
14	20	3	
15	25	3	
16	28	.94	
17	32	.94	
18	35	.94	
19	38	.94	Moderate
20	42	.94	
21	46	.94	Mild
22	50	.94	
23	53	.94	WNL
24	57	.94	

