

TALSA Scoring Manual: Category Judgment

Test Description:

Category Judgment measures the ability to access knowledge of category membership through words (verbal semantics) and through pictures (conceptual semantics). The patient/client hears two words or sees two pictures and decides whether or not they belong to the same category. The use of one and five second intervals between the words or nonwords assesses verbal short-term and working memory.

Test Variations:

1. Words – 1 second interval consisting of **8** items.
2. Words – 5 second interval consisting of **8** items.
3. Pictures – 1 second interval consisting of **8** items.
4. Pictures – 5 second interval consisting of **8** items.

Scoring each Question

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

- 1** – Wrong answer
- 2** - Partially met criteria. Partial credit is allowed when the patient/client gives the correct answer but responds early (i.e., before the beep) or late (i.e., after the response screen has disappeared.) The clinician can indicate the reason in the comment section.
- 3** – Correct answer

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. For the 12 item forms, the lowest possible raw score is 12; the highest possible raw score is 36.
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 (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.

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

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.

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

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 – Category Judgment

Wrong = 1 point, Partially Correct = 2 points, Correct = 3 points

5.1 Category Judgements - Pictures 1 sec.				
#	ITEMS	Answer	Points	Comments
1	nightstand broccoli	N		
2	boat car	Y		
3	bus artichoke	N		
4	carrot onion	Y		
5	corn jet	N		
6	mouse sheep	Y		
7	piano violin	Y		
8	string beans chair	N		
RAW TOTAL (sum points)				
T-Score (from crosswalk table below)				Standard Error (from table below)
5.2 Category Judgements - Pictures 5 sec.				
#	ITEMS	Answer	Points	Comments
1	piano monkey	N		
2	violin harp	Y		
3	jet train	Y		
4	bookshelf dresser	Y		
5	cat bed	N		
6	zebra lion	Y		
7	mouse clarinet	N		
8	motorcycle sheep	N		
RAW TOTAL (sum points)				
T-Score (from crosswalk table below)				Standard Error (from table below)
5.3 Category Judgements - Words 1 sec.				
#	ITEMS	Answer	Points	Comments
1	dresser giraffe	N		
2	accordion lion	N		
3	string beans chair	N		
4	tambourine organ	Y		
5	asparagus celery	Y		
6	mouse sheep	Y		
7	carrot onion	Y		
8	bus artichoke	N		
RAW TOTAL (sum points)				
T-Score (from crosswalk table below)				Standard Error (from table below)
5.4 Category Judgements - Words 5 sec.				
#	ITEMS	Answer	Points	Comments
1	banjo accordion	Y		
2	zebra lion	Y		
3	violin harp	Y		
4	jet train	Y		
5	celery bench	N		
6	motorcycle sheep	N		
7	piano monkey	N		
8	stringbeans artichoke	Y		
RAW TOTAL (sum points)				
T-Score (from crosswalk table below)				Standard Error (from table below)

Scoring Cross-walk Tables [Raw summed scores to T-scores]

- Grayed scores indicate estimates (no empirical data available at these low scores)

5.1 Category Judgement - Pictures 1s			
8-item Form: Sum Score to T-Score Conversion Table			
Raw summed score	T-Score	Standard Error (SE)	Severity
8	10	5	Severe
9	10	5	
10	10	5	
11	10	5	
12	10	5	
13	15	5	
14	20	5	
15	20	5	
16	29	0.99	
17	31	0.99	
18	36	0.99	
19	40	0.99	
20	43	0.99	Mod
21	46	0.99	
22	49	0.99	Mild
23	53	0.99	
24	56	0.99	WNL

5.3 Category Judgement - Words 1s			
8-item Form: Sum Score to T-Score Conversion Table			
Raw summed score	T-Score	Standard Error (SE)	Severity
8	10	5	Severe
9	10	5	
10	10	5	
11	10	5	
12	10	5	
13	15	5	
14	20	5	
15	20	5	
16	26	0.99	
17	31	0.99	
18	34	0.99	
19	37	0.99	
20	41	0.99	Mod
21	44	0.99	
22	48	0.99	Mild
23	52	0.99	
24	55	0.99	WNL

5.2 Category Judgement - Pictures 5s			
8-item Form: Sum Score to T-Score Conversion Table			
Raw summed score	T-Score	Standard Error (SE)	Severity
8	10	5	Severe
9	10	5	
10	10	5	
11	10	5	
12	10	5	
13	15	5	
14	20	5	
15	20	5	
16	29	0.99	
17	32	0.99	
18	35	0.99	
19	39	0.99	
20	42	0.99	Mod
21	45	0.99	
22	49	0.99	Mild
23	52	0.99	
24	55	0.99	WNL

5.4 Category Judgement – Word 5s			
8-item Form: Sum Score to T-Score Conversion Table			
Raw summed score	T-Score	Standard Error (SE)	Severity
8	10	5	Severe
9	10	5	
10	10	5	
11	10	5	
12	10	5	
13	15	5	
14	20	5	
15	20	5	
16	28	0.99	
17	31	0.99	
18	35	0.99	
19	39	0.99	
20	42	0.99	Mod
21	45	0.99	
22	49	0.99	Mild
23	52	0.99	
24	56	0.99	WNL