

EC-COSI-A 12y0m – 16y11m

Electronic Children's Cognitive Screening Instrument 2020

- All items should be administered in an even pace and in the order presented.
- No feedback should be given about correct or incorrect answers.
- Please use PowerPoint stimuli when  is present.
- Please use a timer when  is present.

The patient will need a pen and paper – ensure they have this to avoid delay

Patient Information			
Childs Name		Gender	Hospital Number
	Year	Month	Day
Date of Testing			
Date of Birth			
Age at Testing			
Handedness:			
Examiners Name:			
Category Raw Scores			
Sum all raw scores for each Index. The Index is stated in bold next to the question.			
Language (L) Index	/35		
Fluency (F) Index	/14		
Attention (A) Index	/21		
Memory (M) Index	/19		
Visuospatial (VS) Index	/15		
Total	/104		

Screen - (Do not continue with test if patient cannot answer the below questions)

1. What is your name?

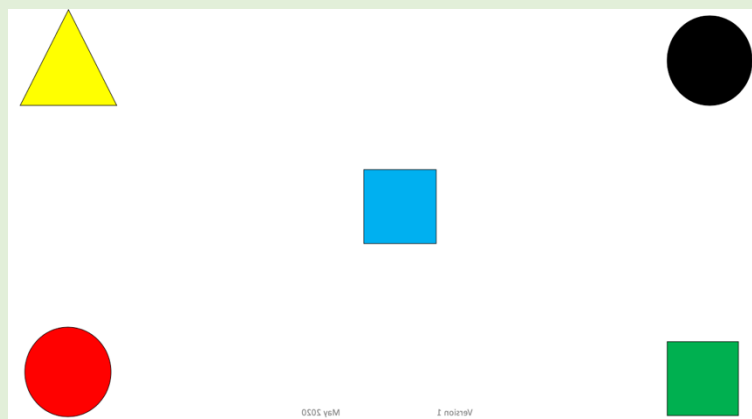
2. How old are you?

1. Orientation (A Index)	Score (0-1)	
What is the date today?	0	1
What is the month?	0	1
What is the year?	0	1
What place are you in?	0	1
Which town/city are you in?	0	1
What country are we in?	0	1
Total Score (/6)		

 2.Language Comprehension (L Index)	Score (0-1)			
Say to patient ‘Here are 5 shapes. I’m going to ask you to point to some of these shapes. To point to a shape, you point to a corner or to the middle, wherever the shape is (point to a corner as an example)’ <i>Make sure the patient understands</i> ‘Let’s have a practice. Point to the black circle. Point to the yellow triangle. Point to the green square. Point to the red circle. Point to the blue square.’ If the patient makes a mistake you can correct them to ensure they understand the instructions. ‘Now lets’ do some more. Point to the black circle’	If incorrect, score 0 and discontinue with this subtest.			
1. Point to the blue square and a circle.			0	1
2. Point to the red circle and the yellow triangle.			0	1
3. Point to the yellow triangle, the black circle and a square.			0	1
Total Score (/3)				

Don't forget that the patient's video is flipped, so when they point to the top left, you will see it as the top right.

Here are the stimuli flipped to track patient responses.





3.Registration (A Index)

Say to patient 'I am going to tell you three words, and I'd like you to say the names after me.'

Words	Score 1 point for each word correctly repeated initially	
1. Bed	0	1
2. Shoe	0	1
3. Train	0	1
Score (/3)		

Say to patient 'Could you repeat that two more times?'

Time 1	Tick when repeated	Time 2	Tick when repeated
Bed		Bed	
Shoe		Shoe	
Train		Train	

After patient repeats say 'Try to remember these words, because I am going to ask you about them later'.

4. Sequences (A Index)

Say to patient 'Could you say the days of the week backwards, starting from Sunday?'

Sunday, Saturday, Friday, Thursday, Wednesday, Tuesday, Monday	Score (0-4)				
	0	1	2	3	4
If the patient makes a mistake, do not stop them. Let them continue and check subsequent answers. Maximum 4 points, minus 1 point for every mistake made.					
Total Score (/4)					



5. Auditory Attention (A Index)

Say to patient 'We are going to point to some shapes again, in the same way as before.'

Have the patient practice pointing to each shape.

'Now I am going to read you a list of words. Each time I say the word 'triangle' I would like you to point to the triangle' **Remember the patient's video is flipped.**

'When you hear any other word, don't do anything. So, if I said square, what would you do?'

Practice: Read list of words to patient 'Round, What, Where, Triangle, Stay, Happy.'

If understood **say to patient** 'Now I am going to play a recording with a long list of words, are you ready?' If not understood: Read instructions again.

Play recording – Turn off your video to improve internet connection and reduce lag of audio

Response	S	Error	R	S	E	R	S	E
Square		C	Full		C	TRIANGLE	1	C
Ball		C	Stay		C	Round		O
Later		C	Square		C	Give		C
What		C	Yellow		C	Oval		C
See		C	Time		C	Then		C
TRIANGLE	1	C	Circle		C	TRIANGLE	1	C
Round		C	Round		C	Stay		O
Time		C	Square		C	TRIANGLE	1	C
Oval		C	Time		C	Yellow		O
Ball		C	Knife		C	Time		C
Circle		C	Square		C	Circle		C
TRIANGLE	1	C	Round		C	Round		C
Then		C	Later		C	Time		C
Give		C	Happy		C	Knife		C
Oval		C	Oval		C	Square		C
Red		C	Circle		C	Round		C
Then		C	Stay		C	Ball		C
Hole		C	Time		C	Happy		C
Time		C	TRIANGLE	1	C	Oval		C
Square		C	Full		C	Circle		C
TRIANGLE	1	C	TRIANGLE	1	C	Stay		C
Circle		C	Oval		C	Time		C
TRIANGLE	1	C	Stop		C	Full		C
Give		C	Time		C	Square		C
Then		C	Bat		C	Time		C
This		C	Rectangle		C	Oval		C
Rectangle		C	Stay		C	Stop		C
Time		C	Circle		C	Time		C
Stay		C	Stay		C	TRIANGLE	1	C
TRIANGLE	1	C	TRIANGLE	1	C	Round		O
Black		C	Time		C	Square		C
What		C	TRIANGLE	1	C	TRIANGLE	1	C
Give		C	Ball		C	Ball		O
TRIANGLE	1	C	Later		C	Bat		C
Oval		C	What		C	Rectangle		C
Then		C	Where		C	Stay		C

Raw Correct (0-15): Raw Commissions (C): Raw Omissions (O):

eCCoSI Commissions: eCCoSI Correct: eCCoSI Total (0-8):

Please see the scoring table at the end to calculate eCCoSI Commission, eCCoSI Correct and eCCoSI Total (eCCoSI Correct + eCCoSI Commission).

 6. Phonemic Fluency (F Index)				
Say to patient 'I'm going to say a letter, and I'd like you to say as many words as you can, that start with that letter. But I would like you to not say any names or places, so you couldn't say Fred, or France, but you could say Fish. Do you understand that? Are you ready? You have 1 minute. The letter I want you to use is S. If child gives 71, 72, 73 etc. Stop timer. Say 'can you give me some different words?' Continue timer. Time 1 minute. Allow one prompt: 'Can you think of anymore words beginning with S?'			Number of correct responses	Score (Circle)
			≥18	7
			12-17	6
			9-11	5
1.....	7.....	13.....	7-8	4
2.....	8.....	14.....	5-6	3
3.....	9.....	15.....	3-4	2
4.....	10.....	16.....	2-1	1
5.....	11.....	17.....	0	0
6.....	12.....	18.....		
Number of Correct Responses ()				

 7. Semantic Fluency (F Index)				
Say to patient 'Now I would like you to name as many animals as you can. They can begin with any letter.' Time 1 minute. Allow one prompt: 'Can you think of anymore animals?'			Number of Correct responses	Score (Circle)
			≥20	7
			14-19	6
			11-13	5
1.....	7.....	13.....	8-10	4
2.....	8.....	14.....	6-7	3
3.....	9.....	15.....	4-5	2
4.....	10.....	16.....	2-3	1
5.....	11.....	17.....	0-1	0
6.....	12.....	18.....		
Number of Correct Responses ()				

8. Delayed Memory (Memory Index)		
Say to patient 'Do you remember the 3 words I told you towards the start of the test?' Score 2 points for each word correctly recalled.	Score (0-2)	
1.....	0	2
2.....	0	2
3.....	0	2
Total (/6)		

 9. Immediate Memory (Memory Index)				
Say to patient 'I'm going to tell you some things about a man, and I'd like you to repeat his name, favourite food, and favourite sport after me 3 times, and remember them'.				
1. Michael Rogers		2. Pizza		3. Football
Score 1 point for each correct word in each category for the 1 st repetition only.				
Words	Time 1	Time 2	Time 3	Score (0-1)
Name				
Food				
Sport				
Total Score (/3)				

 10. Visual Memory (Memory Index)	Score
Say to patient 'I'm going to show you four pictures. Later I am then going to mix them up and I'd like you to pick them out of a bigger group of pictures, so look at them carefully.' Show each image for 5 seconds . <i>For each image confirm with patient that the slide has changed.</i>	To score later

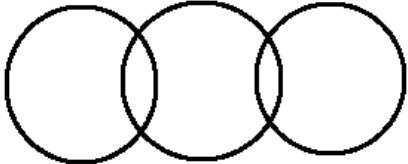
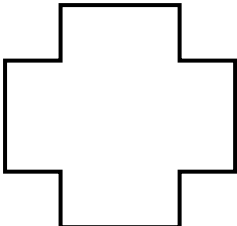
 11. Language Production (Language Index)	
Say to patient 'These pictures here tell a story. Could you tell me what they are showing or what the story is?'	
Document answer below and include extra prompts/questions if the patient is stuck on how to respond e.g. 'where are they?'	
	Score (0-1)
Good detail	0 1
Structure	0 1
Full Sentences	0 1
Total Score (/3)	
Please see scorer at the end	

12. Verbal Comprehension (L Index)				
Say to patient 'Can you repeat the following sentences exactly how I say them?' <u>Score words underlined</u>		Score words (0-1)		Score sentences (0-1)
1. <u>Sleep</u> well		0	1	0 1
2. The dogs <u>run</u> home		0	1	0 1
3. The cat saw the <u>buttercup</u>		0	1	0 1
4. Bob drove the <u>tractor</u> home		0	1	0 1
5. The <u>caterpillar</u> ate the leaf for lunch		0	1	0 1
6. Lucy used the <u>computer</u> for her homework		0	1	0 1
Sub Totals:				
Overall Total (/12)				

13. Naming (Language Index)							
Say to patient 'can you name these items?'				Time taken to name all items:			
SPOON		BOOK		KANGAROO		PENGUIN	
ANCHOR		CAMEL		DRUM		RHINO	
BARREL		CROWN		CROCODILE		RECORDER	
Total (/12)							

14. Semantic Knowledge (Language Index)		
Use pictures from previous task. Say to patient 'can you...'		Score (0-1)
1. Tell me which one is to do with royalty		0 1
2. Tell me which one is a reptile		0 1
3. Tell me which one is found in Australia		0 1
4. Tell me which one is to do with literacy		0 1
Total (/4)		

15. Reading (Language Index)	
Say to patient 'Can you read the following words out loud?' Score one point if all items are correct.	Score
SEW	
PINT	
SOOT	
DOUGH	
HEIGHT	
Total (/1)	

16. Picture Copying (VS Index)	
Say to patient 'Using your pen and paper can you draw this image and hold it up to the camera to show me?' <i>Repeat for both images – draw their response in the blank space below</i>	Score (0-1)
	0 1
	0 1
Total (/2)	
<i>Please see the question scorer at the end.</i>	

17. Jigsaw Cancellation (VS Index)							
Say to patient 'I am going to show you a number of jigsaw pieces, in each jigsaw piece there is a letter, I would like you to shout out the letter in any of the pieces that look like the jigsaw piece in the box. Let's have a practice.'							
Explain that only the target orientation is correct.							
Use example on the PowerPoint slide to explain/as a practice.							
							
After practice: Say to patient 'There will be 2 slides of jigsaw pieces. You will have 15 seconds to do each, so I would like you to try and do this as quickly as you can without making any mistakes.' <i>Ask the patient to confirm the slide change, then start the timer.</i>							
Slide 1 Responses				Slide 2 Responses			
Slide 1 Correct		Slide 1 Incorrect		Slide 2 Correct		Slide 2 Incorrect	
Total Raw correct		Total Raw incorrect		eCCOSI correct		eCCOSI incorrect	
eCCOSI Total (/6)							
<i>Please see the question scorer at the end.</i>							

18. Dot Counting (Visuospatial Index)	
Say to patient 'I am going to show you some dice. Can you count the dots without pointing?'	Score (0-1)
Dice 1 (5 dots)	0 1
Dice 2 (7 dots)	0 1
Dice 3 (6 dots)	0 1
Total (/3)	

19. Silhouettes (Visuospatial Index)			
Say to patient 'can you tell me what these objects are?' Show pictures and mark answers below.			
Car		Dog	
Hat		House	
Total Score (/4)			

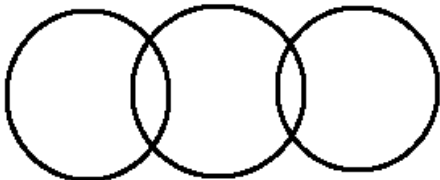
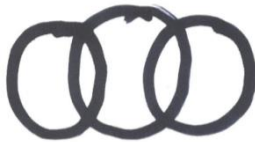
20. Delayed Memory II – Free Recall (Memory Index)	
Say to patient 'Can you remember the man I told you about earlier? Can you tell me everything you remember about him?' Score 2 points for each correct answer.	
1. 2. 3.	
Total Free Recall (/6)	
Cued Recall - Only administer if 1 or more of the previous answers are incorrect	
If all items were freely recalled correctly, skip .	
First prompt using underlined categories for any category where free recall was incorrect or omitted. Score one point if correctly recalled with cue.	
What was his <u>name</u> ? What was the <u>food</u> ? What was the <u>sport</u> ?.....	
For any omissions or errors using prompts, provide all choices for the category.	
Michael Rodgers	Ice Cream Golf
Ian Willows	Pizza Rounders
Harry Lane	Sandwiches Football
Total Cued Recall (/3)	
Total for free recall and cued recall (/6)	

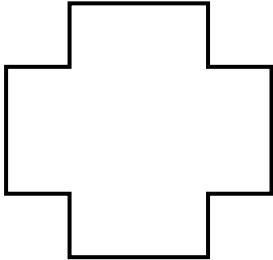
21. Visual Delayed Memory (Memory Index)	
Say to patient 'I showed you four pictures earlier. Can you pick them out of all of these pictures?' The correct response is shown in bold	
Which car did I show you?	1 2 3 4 5
Which table did I show you?	1 2 3 4 5
Which house did I show you?	1 2 3 4 5
Which teapot did I show you?	1 2 3 4 5
Total Score (/4)	

Scoring Guide

5: Scorer Auditory Attention (Attention)			
Correct responses (raw)	Correct responses (CCoSI)	Commission errors (raw)	Commission errors (CCoSI)
15	4	0	4
13-14	3	1	3
10-12	2	2-4	2
7-9	1	5-7	1
<7	0	>7	0

11: SCORER LANGUAGE PRODUCTION (Language)	
	One point is awarded for each of the following:
1	Good detail that goes beyond basic description and includes abstract concepts.
2	Logical sentence structure with no grammatical errors.
3	Full sentences.

16: PICTURE COPYING (Visuospatial)	
	<u>Score 1</u> Exactly 3 circular figures on a horizontal axis. No major distortions (e.g. bump or angles). The left and right circles must overlap with the central circle but not touch each other. a. 
	<u>Score 0</u> Some example of incorrect responses. a.  b. 

	<u>Score 1</u> A 2-dimensional cross-shaped figure. No major distortions (e.g. easily identified as a cross). The horizontal and vertical arms of the cross are roughly parallel to the opposite horizontal and vertical arms. a. 
	<u>Score 0</u> Some examples of incorrect responses. a.  b.  c. 

17: SCORER JIGSAW CANCELLATION (Visuospatial)			
Slide 1 Correct Answers		Slide 2 Correct Answers	
G, C, H, Y, P, D, B, Z, I, F, K, S		R, V, H, Y, K, J, F, L, T, P, I, X	
Total Correct responses (raw)	Correct responses (CCoSI)	Total Incorrect responses (raw)	Incorrect responses (CCoSI)
23-24	4	0	2
19-22	3	1-3	1
16-18	2	>3	0
13-15	1		
<13	0		