

Appendix Figure 1. The s-MoCA with instructions. Test items have *not* been modified from the original MoCA (Nasreddine et al., 2005). The order of the items has been altered to preserve the duration between word list presentation and delayed recall. The MoCA is freely available (<http://www.mocatest.org/>). All images and instructions were reproduced with permission from MoCA<sup>®</sup>.

<b>MEMORY</b> Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.		FACE	VELVET	CHURCH	DAISY	RED
	1st trial					
	2nd trial					

**VISUOSPATIAL / EXECUTIVE**

Draw CLOCK (Ten past eleven)  
(3 points)

  
  
  
  
  

[ ] [ ] [ ]  
Contour Numbers Hands

\_\_\_/4

<b>ATTENTION</b>	Serial 7 subtraction starting at 100	[ ] 93	[ ] 86	[ ] 79	[ ] 72	[ ] 65
4 or 5 correct subtractions: <b>3 pts</b> , 2 or 3 correct: <b>2 pts</b> , 1 correct: <b>1 pt</b> , 0 correct: <b>0 pt</b>						

\_\_\_/3

<b>ABSTRACTION</b>	Similarity between e.g. banana - orange = fruit	[ ] watch - ruler
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<b>LANGUAGE</b>	Fluency / Name maximum number of words in one minute that begin with the letter F	[ ] _____ (N ≥ 11 words)
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**ORIENTATION**

[ ] Place

**NAMING**

[ ]

\_\_\_/1

\_\_\_/1

<b>DELAYED RECALL</b>	Has to recall words <b>WITH NO CUE</b>	FACE [ ]	VELVET [ ]	CHURCH [ ]	DAISY [ ]	RED [ ]	Points for UNCUED recall only
<b>Optional</b>	Category cue						
	Multiple choice cue						

\_\_\_/5

Total Score: \_\_\_/16

## s-MoCA Instructions (8-items)

\*These instructions have not been modified from the original MoCA (Nasreddine et al., 2005), however the order of presentation has been changed in order to preserve an adequate delay interval between the word list presentation and recall.

### Memory:

Administration: The examiner reads a list of 5 words at a rate of one per second, giving the following instructions:

**“This is a memory test. I am going to read a list of words that you will have to remember now and later on. Listen carefully. When I am through, tell me as many words as you can remember. It doesn’t matter in what order you say them”.**

Mark a check in the allocated space for each word the subject produces on this first trial. When the subject indicates that (s)he has finished (has recalled all words), or can recall no more words, read the list a second time with the following instructions:

**“I am going to read the same list for a second time. Try to remember and tell me as many words as you can, including words you said the first time.”**

Put a check in the allocated space for each word the subject recalls after the second trial. At the end of the second trial, inform the subject that (s)he will be asked to recall these words again by saying,

**“I will ask you to recall those words again at the end of the test.”**

Scoring: No points are given for Trials One and Two.

### Alternating Trail Making:

Administration: The examiner instructs the subject:

**“Please draw a line, going from a number to a letter in ascending order. Begin here [point to (1)] and draw a line from 1 then to A then to 2 and so on. End here [point to (E)].”**

Scoring: Allocate one point if the subject successfully draws the following pattern: 1 -A- 2- B- 3- C- 4- D- 5- E, without drawing any lines that cross. Any error that is not immediately self-corrected earns a score of 0.

### Visuoconstructional Skills (Clock):

Administration: Indicate the right third of the space and give the following instructions:

**“Draw a clock. Put in all the numbers and set the time to 10 after 11”.**

Scoring: One point is allocated for each of the following three criteria:

- Contour (1 pt.): the clock face must be a circle with only minor distortion acceptable (e.g., slight imperfection on closing the circle);

- Numbers (1 pt.): all clock numbers must be present with no additional numbers; numbers must be in the correct order and placed in the approximate quadrants on the clock face; Roman numerals are acceptable; numbers can be placed outside the circle contour;
- Hands (1 pt.): there must be two hands jointly indicating the correct time; the hour hand must be clearly shorter than the minute hand; hands must be centred within the clock face with their junction close to the clock centre.

A point is not assigned for a given element if any of the above-criteria are not met.

Serial 7s:

Administration: The examiner gives the following instruction:

**“Now, I will ask you to count by subtracting seven from 100, and then, keep subtracting seven from your answer until I tell you to stop.”**

Give this instruction twice if necessary.

Scoring: This item is scored out of 3 points. Give no (0) points for no correct subtractions, 1 point for one correction subtraction, 2 points for two-to-three correct subtractions, and 3 points if the participant successfully makes four or five correct subtractions. Count each correct subtraction of 7 beginning at 100. Each subtraction is evaluated independently; that is, if the participant responds with an incorrect number but continues to correctly subtract 7 from it, give a point for each correct subtraction. For example, a participant may respond “92 – 85 – 78 – 71 – 64” where the “92” is incorrect, but all subsequent numbers are subtracted correctly. This is one error and the item would be given a score of 3.

Abstraction:

Administration: The examiner asks the subject to explain what each pair of words has in common, starting with the example:

**“Tell me how an orange and a banana are alike”.**

If the subject answers in a concrete manner, then say only one additional time:

**“Tell me another way in which those items are alike”.**

If the subject does not give the appropriate response (fruit), say,

**“Yes, and they are also both fruit.”**

Do not give any additional instructions or clarification.

After the practice trial, say:

**“Now tell me how a ruler and a watch are alike”.**

Do not give any additional instructions or prompts.

Scoring: Only the last item pair is scored. Give 1 point to the item pair if it is correctly answered. The following responses are acceptable:

Ruler-watch = measuring instruments, used to measure.  
The following responses are not acceptable: Ruler-watch = they have numbers.

Verbal fluency:

Administration: The examiner gives the following instruction:

**“Tell me as many words as you can think of that begin with a certain letter of the alphabet that I will tell you in a moment. You can say any kind of word you want, except for proper nouns (like Bob or Boston), numbers, or words that begin with the same sound but have a different suffix, for example, love, lover, loving. I will tell you to stop after one minute. Are you ready? [Pause] Now, tell me as many words as you can think of that begin with the letter F. [time for 60 sec]. Stop.”**

Scoring: Allocate one point if the subject generates 11 words or more in 60 sec. Record the subject’s response in the bottom or side margins.

Orientation:

Administration: The examiner gives the following instructions:

**“Tell me the name of this place, and which city it is in.”**

Scoring: Give one point for each item correctly answered. The subject must tell the exact place (name of hospital, clinic, office).

Naming:

Administration: Point to the figure and say:

**“Tell me the name of this animal”.**

Scoring: One point each is given for the following responses: rhinoceros or rhino.

Delayed recall:

Administration: The examiner gives the following instruction:

**“I read some words to you earlier, which I asked you to remember. Tell me as many of those words as you can remember.”**

Make a check mark (✓) for each of the words correctly recalled spontaneously without any cues, in the allocated space.

Scoring: Allocate 1 point for each word recalled freely without any cues.