

Mini-Mental State” Examination (MMSE)

Folstein et al 1975 – (Maximum Score = 30)

- Screen for cognitive function
- Ages: 18 to over 85 years of age
- Used to track cognitive changes over time
- Subjects must have grade 8 education and be fluent in the language in which the test is administered
- Typically takes 5-10 minutes

Orientation to time (5 points)

- What day is this? 0-1
- What is the date? 0-1
- What is this month? 0-1
- What year is this? 0-1
- What season are we in? 0-1

Orientation to Place (5 points)

- What is the city/town? 0-1
- What province are we in? 0-1
- What building are we in? 0-1
- What floor are we on? 0-1
- What street do you live on? 0-1

Registration (3 points)

- Name 3 objects. Then ask the subject to repeat all 3 objects. Score 1 point for each correct answer.
- Repeat until the subject can get all three objects. For example:

Ball (pause) 0-1

Flag (pause) 0-1

Tree (pause) 0-1

Change the words for serial testing

Attention and Calculation (5 points)

Serial '7's

Count backwards by 7's from 100. (Stop after 5 answers. Give 1 point for each correct answer)

Score 1 for each correct answer

$100 - 7 = 93$ and so on: 86, 79, 72, 65

Alternate test:

Spell ***WORLD*** backwards. (Give 1 point for each correctly placed letter)

DLROW

Recall (3 points)

- After 2 minutes ask for the names of the 3 objects in the 'registration' test.
- Score one point for each correct object

Language - Naming (2 points)

- Point to a pencil/pen and watch and ask the subject to name each as you point to it
- Score 1 point for each correct answer

Language – Repetition (1 point)

- Repeat the following phrase.

“NO IFS, ANDS OR BUTS”

- Repeat up to 5 times but score only the first attempt by the subject
- Give no credit is given if the ‘S’ is omitted
- To receive credit, the response must be fully correct the first time
- Be sure the subject’s hearing is sufficient and careful to enunciate properly

Language – Comprehension

(3 points)

- Ask the subject to perform the following three-stage command.

Take this paper in your right hand, fold it in half and put it on your knee (or alternatively the table or floor)

- Score 1 for each correct step

Reading (1 point)

Ask the subject to read and carry out the following request

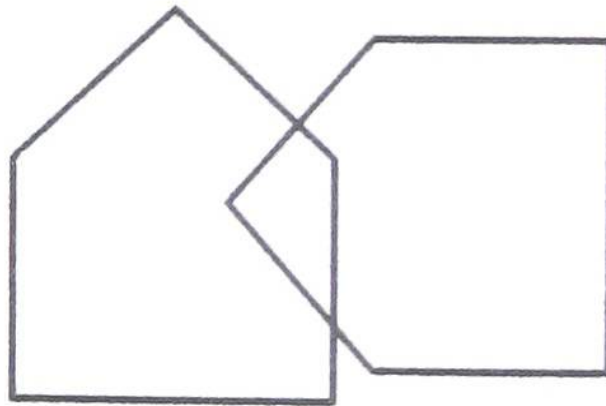
Close your eyes

Writing (1 point)

- Ask the subject to write a sentence
- The sentence must include a subject and verb and make sense
- Ignore errors in spelling and grammar

Drawing (1 point)

- Please copy this design
- Show the subject the following intersecting pentagons



- There must be 5 sides to each pentagon and 4 interlocking sides.

Scoring

- Normal cognitive function 27-30
- Mild cognitive impairment 21-26
- Moderate cognitive impairment 11-20
- Severe cognitive impairment 0-10

Frontal Assessment Battery FAB

Similarities

- In what way are the following alike?

Banana and orange 0-1

Table and chair 0-1

Tulip, rose and daisy 0-1

Mental Flexibility

- Say as many words as you can beginning with the letter “S”
- If no response for 5 sec – say “for instance snow”
- If no response for 10 sec – say “any word beginning with the letter S”
- Allow 60 seconds
- Score

> 9 words	3
6-9 words	2
3-5 words	1
Less than 3 words	0

Motor Programming

- Look carefully at what I'm doing
 - Perform Fist – Edge – Palm 3 times
- Now with your right hand do the same, first with me, then once by your self
- Now, repeat the same 6 times on your own
- Scoring
 - Performs 6 correct sequences alone 3
 - Performs at least 3 correct sequences alone 2
 - Fails alone, but performs 3 correct sequences with the examiner 1
 - Cannot perform at all 0

Conflicting instructions

- When I tap once – you tap twice
To be sure the subject understands the request and if necessary repeat the sequence 3 times
- When I tap twice – you tap once
To be sure the subject understands the request, repeat the trial 3 times
- Now I will mix them up - you still tap twice when I tap once and once when I tap twice.

Sequence 1-1-2-1-2-2-2-1-1-2

- Score

No errors	3
One or two errors	2
Three errors or more	1
Copies tap sequence at least 4 times	0

Inhibitory Control

- Tap once when I tap once – to insure the subject understands the task, perform a series of 3 trials
- Do not tap when I tap twice – to insure the subject understands the task, perform a series of 3 trials
- Now I will mix them up, but when I tap once – you tap once and when I tap twice don't tap
- Sequence: 1-1-1-2-1-2-2-2-1-1-2

- Score

No errors 3

One or two errors 2

More than two errors 1

Subject taps like the examiner at least 4 times

0

Prehension Behavior

- Ask subject to place both hands – palm up – on their knees. Without saying anything or looking at the subject, touch the subjects palms on both sides to see if he/she spontaneously takes your hands. If they do – say – “Now do not take my hands”
- Score
 - Does not take your hands 3
 - Hesitates, and asks what they have to do 2
 - Takes your hands without hesitation 1
 - Takes your hands even after instruction not to do so 0

Total Score = 18

- Similarities 3
- Mental flexibility 3
- Motor Programming 3
- Conflicting instructions 3
- Inhibitory control 3
- Prehension behavior 3