



Memento Cohort

Neuropsychological tests and scales

Instruction booklet

Version of January 2018



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NEURO- PSYCHOLOGICAL TESTS

General instructions for conducting cognitive tests

Test conditions (more specific to cognitive tests):

- ❖ Quiet office, anticipate and avoid interruptions as much as possible during the process, (display on the door: “Test in progress - do not disturb”), consider how to avoid interruptions by telephone calls (ex: call transfers).
- ❖ Inform the participant that the process for the battery of tests takes about 1½ hours.
- ❖ Make sure that participants who usually wear glasses to see up close are wearing them, and the same goes for participants who have hearing aids.
- ❖ Taking time to explain the instructions is crucial for the proper conduct of the tests. Do not hesitate to repeat the instructions for a test if you have the impression that the participant has not understood.
- ❖ The tests must be conducted in private, i.e. only the examiner and the participant must be present at the time of the test.

Instructions for the examiner

- ❖ The questions must be asked in exactly the same way for all participants.
- ❖ The results of the tests can be collated in the **follow-up file / Initial report for patients with cognitive impairment or MCI** and the **notebook for neuropsychological tests**.
- ❖ For the thresholds for inclusion in the cohort refer to the “thresholds for inclusion in the cohort” section of this document.
- ❖ For the initial neuropsychological tests, check the eligibility of the participant using the Excel file containing the thresholds available on the CD “Thresholds Inclusion Neuropsychological Tests tool” (file to be printed and to be included in the participant’s Memento pocket file).
- ❖ In general, in case of questions concerning the conduct or the scoring of a test, please contact the coordinating centre.
- ❖ Show consideration to the participant, but remain neutral with regard to his performance, whether excellent or otherwise.

Information for the participants

“We are going to give you a series of tests. They will enable us you to assess your memory and your attention or language capabilities. The results of these tests will be given to you along with their medical interpretation at a later consultation with your doctor.”

Material:

- ❖ The **follow-up file / Initial report for patients with cognitive impairment or MCI** and the **notebook for neuropsychological tests** provided by the GMA enabling the results of the battery of neuropsychological tests to be collected.

You will find the “main” 48-word encoding and recognition lists of the initial FCSRT 16 in the initial report file and the 2 “parallel” and “main” 32-word encoding and recognition lists in the process notebook for the neuropsychological tests. Please note that the main and parallel lists are to be used alternately from one visit to another for the same participant. On inclusion, if the FCSRT 16 has already been used previously with the participant, the alternative 32-word list should be used.

- ❖ **Instruction booklet** for the neuropsychological tests and scales: notebook containing the detailed instructions for conducting the tests and the scales;
- ❖ **Timer**;
- ❖ **Pencils** (one for the participant, one for the examiner);
- ❖ **Set of images for the DMS 48** (paper + CD);
- ❖ **Image folder for the DO 80**;

- ❖ **Laminated card “CLOSE YOUR EYES” for the MMSE.**
- ❖ **Level of impact for the SRRS**
- ❖ **Word boards for free and cued recall test;**
- ❖ **Board with cubes** for conducting the visual spatial span.

Order of conduct of tests

- I. Mini-Mental State Examination (MMSE)
- II. DMS 48: immediate
- III. Literal verbal fluency: letter P
- IV. Free and cued selective reminding test (FCSRT)
- V. Praxis
- VI. Trail Making Test: Part A
- VII. Trail Making Test: Part B
- VIII. Digit span number recall: forward
- IX. Digit span number recall: backwards
- X. Rey complex figure test: copy
- XI. Free and cued selective reminding test: 20 mins
- XII. Rey complex figure test: 3 mins
- XIII. Frontal assessment battery (FAB)
- XIV. Semantic verbal fluency: animals
- XV. DMS 48: 1 hour
- XVI. Oral image naming test (DO 80)

Optional tests

- XVII. Visuo-spatial span: spatial memory forward
- XVIII. Visuo-spatial span: spatial memory backwards
- XIX. Rey complex figure test: reproduction at 30 mins

I. Mini-Mental State Examination (MMSE)

1. Objective

To evaluate the cognitive state of the participant. This test consists of 30 questions exploring orientation in time, space, short-term memory capacity, and calculation capabilities.

2. Time required to conduct the test

The time for the test is not limited. It is estimated to take between 5 and 10 minutes.

3. Specific material

A card for written instructions (“close your eyes”) and an example of crossed pentagons, a white sheet of paper for writing the phrase/sentence, a watch, a pencil.

4. Method of conducting the test and scoring

Ask the questions out loud.

❖ Orientation in time

For these items, only accept the exact answers. However, with changes to season or month, allow the participant to correct a wrong answer by asking him: *“Are you sure?”*

- Scoring: Each correct answer is worth 1 point. If the answer is wrong or if there is no answer, score 0 points.
- Allow 10 seconds for each answer.

❖ Orientation in space

The only tolerances allowed relate to:

- For question no.6: when the participant comes from another city, we can be satisfied with the city’s hospital (because the name of the hospital of the city may not be known to the participant); if the examination is done in a practice, ask for the name of the medical practice or the street where it is located or the doctor.
- For question no.8: when the name of the department and the region are the same (for example: NORD), you should ask “In which country is that department located?”.
- Each correct answer is worth 1 point.

If the answer is wrong or if there is no answer, score 0 points.

- Allow 10 seconds for each answer.

❖ Immediate recall

Say the 3 grouped words, one per second, facing the participant and speaking clearly.

- Allow 20 seconds for the answer.
- Score 1 point for each word repeated correctly at the first attempt.
- If the participant does not repeat the 3 words on the first try, go over them again until they are repeated correctly. Indeed, the recall test can only be analysed if the 3 words have been recorded.
- Maximum: 6 attempts.

❖ Attention and calcul

Instructions: *“Count back from 100 by taking away 7 each time until I stop you.”*

You are allowed to help the participant by presenting him with the first subtraction: *“What is 100-7?”* and then *“Continue”*). You stop after 5 subtractions and score 1 point for each correct subtraction i.e. when the subtraction of 7 gives the correct answer irrespective of the previous answer; e.g.: 100-7=92: no point is awarded; 92-7=85: the point is awarded.

If the participant asks “how many do I have to take away?” you are not allowed to repeat the instruction (*“Continue as before”*).

For all the participants and even if the participant is unable to perform the 5 subtractions, in order to maintain the principle of an interference task you should ask him to spell the word WORLD backwards: *“Can you spell the word WORLD backwards by starting with the last letter?”* [However, when the participant is having obvious difficulties in working backwards, it is preferable to ask him to spell the word “world” in the normal way before asking him to spell it backwards, in order to help his confidence.]

In this test, the number of letters successively placed in the correct order is counted (example: DLWOR=2) but this score is not counted in the total score.

❖ Recall

- Allow 10 seconds for answering.
- Count 1 point for each correct answer.
- No tolerance is allowed, since the encoding was checked during the recording.

❖ Language

- In general: count 1 point for each correct answer and allow 10 seconds for each answer.

Item 22: You must show a pencil (not a pen or a ballpoint pen). No answer other than pencil is allowed. Do not let the participant touch the object.

Item 23: No answer other than watch or wristwatch is allowed. Do not let the participant touch the object.

Item 24: The phrase/sentence should be spoken aloud, clearly, and facing the participant; only count 1 point if the repetition is entirely correct.

Items 25 - 27: Count 1 point for each item executed correctly. If the participant stops and asks what he has to do, do not repeat the instruction, but say: *“Do what I told you”*.

Item 29: Count 1 point if the phrase/sentence includes a subject and a verb, regardless of errors in spelling or syntax. Allow 30 seconds:

❖ Praxis

Count 1 point if all the angles are present and if the figures intersect on 2 different sides. You may allow several attempts and a time period of one minute.

Add up the sub-scores as well as the MMSE total, counting missing values as zero.

II. DMS 48: immediate

1. Objectives

DMS 48 is a test for assessing the visual recognition memory.

This is a test consisting of a series of 48 images (targets) which the participant memorises in an incidental way then two sets of 48 pairs of images, each pair consisting of the target and another image never seen by the participant (distractor). The distractors are not repeated across the sets. The targets and the distractors are presented side by side, their distribution to the right and to the left being equivalent for each set, half of the targets changing sides between each set. The targets of Set 1 are presented in the strictly opposite order to their order during the acquisition phase in order to check any effects of forgetfulness.

The 48 targets are divided into three groups of 16 images each:

- 1) a “unique” group: each target is presented with a distractor with no semantic or lexical relationship.
- 2) a “paired” group: each target is presented with a distractor that is similar in terms of shape, colour and name.
- 3) an “abstract” group: the targets and distractors are abstract stimuli that are difficult to verbalise.

2. Time required to conduct the test

The overall time for the process is 1 hour. The test involves delayed recall after about 1 hour.

3. Phase 1: Acquisition

The participant should not know that it is a memory test.

The instruction is as follows: “I’m going to show you some images, and I want you to tell me if each of them has more than three colours or less than three colours”.

You should time how long the acquisition phase takes.

You show the first target and wait for the answer, then the second target is displayed, and so on. There is no time limit for the answer, which is therefore a function of the cognitive speed of the participant. This test was in fact originally developed to test capacity rather than performance. You should ensure that the participant does not go too fast, in order to allow visual processing of the image. Similarly, if the participant is too slow, you should encourage him to go faster so that you can maintain a fairly consistent encoding time between all the participants. Some participants may ask questions about whether the white or the border of the objects count as a colour; you must answer these questions in the affirmative or give an answer that is least unsettling for the participant.

The answers of the participant are not recorded but make it possible to check if the participant is able to manage the perceptual processing of each image.

Record the duration of the encoding phase in the procedural notebook.

4. Distraction task: literal verbal fluency test (see below)

5. Phase 2: Recognition

Immediate recall:

This takes place about 3 minutes after the acquisition phase.

Use Set 1 in the image folder. The participant sees each pair of images one by one and has to recognise the target presented during the acquisition phase.

The instruction is as follows: *“I’m now going to show you some pairs of pictures, there will be one you’ve seen before and one you’ve never seen before. I will ask you to show me the one you’ve seen before.”*

This part is also timed. You should show the first pair of images, note the participant’s answer on the score sheet and move on to the second pair and so on.

Do not correct the participant if he makes a mistake. A reminder of the instruction or any other form of prompt may be used; *“Look well at both images before you answer”*.

You should not inform the participant that a second recognition phase will take place. It is necessary that you obtain an answer, even if the participant does not know how to answer (answer through a forced choice), with the

help of prompts such as: *“In your opinion?” “Just on the off chance what would you choose?”, “Do you prefer A or perhaps B”* etc...

6. Scoring

Count the number of correct answers and record it at the bottom of the results table.

III. Literal verbal fluency: letter P

Instructions: *“You have to tell me as many English words as possible, either nouns or verbs or adjectives, etc... starting with the letter that I will give you, and you will have 2 minutes to do this. Don't say words that are part of the same “word family”, or proper nouns and do not repeat words...For example, with the letter L you can say: Lune, Laver, Laborious. Do you understand?”*

When the examiner is sure that the participant has understood, he tells him: *“Give me as many English words as possible starting with the letter P”*. Then start the timer. The allocated time is 120 seconds. In case of an infringement of the rule (for example, the participant gives words beginning with another letter), remind him of the instruction: *“Careful, you can only say words beginning with the letter P”*.

Scoring

Count the total number of words produced by the participant and record this in the process notebook in the box provided for this purpose.

Also note the number of repetitions, as well as the number of intrusion errors (word beginning with another letter). The final score is the total number of words minus intrusions and repetitions.

Be careful if several words begin with the same prefix - in this case we will count one word each time, for example: “parachute”, “paratonnerre”, “parasol”, “parapluie” - each of these words is counted; similarly for compound words such as “porte-clés”, “porte-manteau”, “porte-carte”, “porte-monnaie” - here, too, each word will count.

On the other hand, if several words have the same root, we will only count one word, for example: “porte”, “portal”, “portillon”, only the word “porte” is counted.

IV. Free and cued selective reminding test (FCSRT)

1. Objectives

Anterograde episodic memory test which consists of learning a list of 16 words, the encoding of which is controlled and aided by semantic indexing. This test makes it possible to assess various memory processes.

2. Time of process

The test involves delayed recall after about 20 minutes.

3. Specific material

Encoding phase: 4 cards with a list of 4 words comprising the 16 target items. **Be careful as there are 2 lists of different words to use alternately from one visit to the next:**

- Pre-inclusion recognition phase: 7 cards with 16 target items mixed with 16 semantic distractors and 16 neutral distractors.
- Follow-up recognition phase: 5 cards with 16 target items mixed with 16 neutral distractors. There are two different sets of cards (main list and parallel list) to be used alternately from one follow-up to another.

4. Procedure and instructions

The test is divided into several phases:

a) Phase of encoding of the 16 words:

Present one card at a time to the participant. For each card with 4 items, ask the participant to look for and read aloud the item (for example, daffodil) corresponding to the category index provided (for example, flower).

The instructions are as follows: "I'm going to show you some cards; each card has four words written on it; I want you to memorise all the words on the cards. Here is the first card: from these four words, tell me which is the fish?" [Answer]. Which is the garment? [Answer] etc..."

The order of the semantic categories is fixed and follows the order noted on the procedure sheet. There is no time limit for obtaining an answer during the encoding phase. If the participant is having difficulty at this stage, for example due to significant semantic impairments, the test will be interrupted.

b) Immediate cued recall (ICR):

When the four items on a card have been correctly identified, you remove the card and carry out an immediate cued recall (ICR) test of the four words: you say the category index out loud and the participant must recall the item belonging to that category.

The instructions are as follows: *"Now, I'm going to take back the sheet and you have to tell me what was the fish that was written on this card?"* [Answer]; *"What was the garment?"* [Answer]; etc..."

There is no time limit for this phase of immediate cued recall.

You provide immediate feedback (correct - incorrect) on the quality of the answer. If certain words are not recovered (incorrect answers or no answers) during this immediate cued recall, you show the corresponding card, provide the name of the category of the item(s) not recalled (**and only those items**), and the participant must again identify and read out the item(s) in response to its (their) category. Then, you take away the card and again carry out an immediate cued recall test, **only for the item(s) not previously mentioned**. If the participant still makes a mistake or cannot answer, you provide him with a third and final selective encoding with immediate cued recall. The test is stopped if the participant has not encoded any of the words after 3 attempts.

The same procedure is followed for the other three cards with four items.

c) Distraction task:

After the presentation and the successful immediate cued recall of the fourth card, the participant is subjected to a distraction task lasting 20 seconds (counting backwards by 1, starting from 374).

The instruction is as follows: *"Can you count backwards starting from 374?"*. The participant has to count out loud for 20 seconds (do not correct errors if there are any).

d) Free (FR) and cued recall (CR) of the 16 items:

The participant is asked to recall all the words that have been presented to him on the cards, in any order.

The instructions are as follows: *“Please now tell me, in any order, as many of the words as you can remember from the words that were shown to you earlier on the cards. You have two minutes to do this.”*

The free recall phase lasts 2 minutes.

During the recall, he transcribes the correct answers, for example by noting a “+” sign next to the corresponding item on the process notebook).

During the free recall phase you should not point out incorrect or duplicate words (but note them).

The free recall phase is followed by a cued recall phase, but **only for the items not mentioned** by the participant in free recall or for the items for which the participant made a mistake.

The instructions are as follows: *“You could not remember certain words (and/or some were not correct) so I suggest you try to find them again. On the cards that I showed you earlier, what was the (...) (name of the category)?”*

The participant has 10 seconds per item for the cued recall. If, during the cued recall phase, the item is still not recalled or if the participant provides an incorrect answer, the examiner provides the correct answer verbally to the participant at the end of the 10-second period, at least for the cued reminders 1 and 2: during the third cued reminder, the examiner no longer provides any response or feedback to the participant.

The free recall procedure and then the cued recall procedure is repeated 3 times.

The three tests are separated by a distraction task lasting 20 seconds involving counting backwards from **329, 267, and 188** respectively.

You note the number of correct recollections for each free recall (FR1, FR2, FR3), the number of correct recollections for each cued recall (CR1, CR2, CR3), and the total number of correct recollections (TR1 = FR1 + CR1; TR2 = FR2 + CR2; TR3 = FR3 + CR3).

e) Recognition:

➤ During the initial assessment: HITS, FAS, FAN recognition

Immediately after the reverse count which follows the third cued recall test, a YES/NO recognition test is conducted: the participant is tasked with recognising the 16 target items mixed with 16 semantic distractors and with 16 neutral distractors. The 48 items are presented one by one on cards, and their order of presentation is fixed for all participants.

The instructions are as follows: *“Now, I’m going to show you a series of words. Some of these words belong to the list of words that you have just learned and which were presented on cards, others are new. For each word I want you to tell me if you have seen it previously YES or NO. Here is the first word, did you see it in the previous phase YES or NO?”*

The participant must answer YES or NO. There is no time limit for the responses

You identify the number of correct recognitions (HITS) and the number of false alarms: acceptances of a semantic distractor (FAS) and acceptances of a neutral distractor (FAN)

➤ During other follow-up visits

Immediately after the reverse count which follows the third cued recall test, a YES/NO recognition test is conducted: the participant is tasked with recognising the 16 target items mixed with 16 neutral distractors. The 32 items are presented one by one on cards, and their order of presentation is fixed for all participants.

The instructions are as follows: *“Now, I’m going to show you a series of words. Some of these words belong to the list of words that you have just learned and which were presented on cards, others are new. For each word I want you to tell me if you have seen it previously YES or NO. Here is the first word, did you see it in the previous phase YES or NO?”*

The participant must answer YES or NO. There is no time limit on answers.

You identify the number of correct recognitions (HITS) and the number of acceptances of a neutral distractor (FAN).

V. Praxis

This battery includes three different dimensions: execution of symbolic gestures upon verbal command (five gestures), mimic actions (five gestures) and imitation of abstract gestures (eight gestures).

1. Time of process

The process, including instructions, only requires about four minutes.

2. Information for the participant

The instructions are listed directly in the process notebook.

❖ Execution of five symbolic gestures upon spoken command (which can also be called: conventional, iconic, pictorial):

- “Military salute”
- “Shhh”
- “That smells bad”
- “He is crazy”
- “Blow a kiss”

Rating: The gesture is considered correct if it is generally recognisable by an outside observer.

- **1 point:** Correct gesture
- **0 points:** Incorrect gesture

❖ Performance upon verbal command of five action mimes (which can also be called: pantomimes, using objects without actually having objects):

- Hammer in a nail with a hammer
- Tear a sheet of paper
- Light a match
- Comb your hair with a comb
- Have a drink

Rating: The gesture is considered correct if it is generally recognisable by an outside observer.

- **2 points:** Normal gesture
- **1 point:** Body-as-object response for one hand only or imperfect but recognisable gesture
- **0 points:** Unrecognisable gesture or two hand assimilation

❖ Imitation of eight abstract gestures (which can also be called: arbitrary, meaningless):

- Right palm on the right cheek (IpsiD)
- Back of the right hand on the left cheek (controD)
- Left palm on the left cheek (IpsiG)
- Back of the left hand on the right cheek (controG)
- Left hand making cones with fingers II-V and right hand flat (horns)
- Butterfly
- Rhombus with fingers II-III hands swapped over (rhombus)
- Double ring

The gesture should be maintained until the participant has reproduced it or it is obvious that he cannot do it. In case of error in mirroring ask *“Are you sure? Is it the same hand as me?”*.

The hands must move back to the table between each gesture. The gestures are shown in Figure no.1.

Rating: The gesture is considered correct, if the participant ends up doing it correctly, even after being reminded on the instructions.

- **1 point:** Correct gesture
- **0 points:** Incorrect gesture

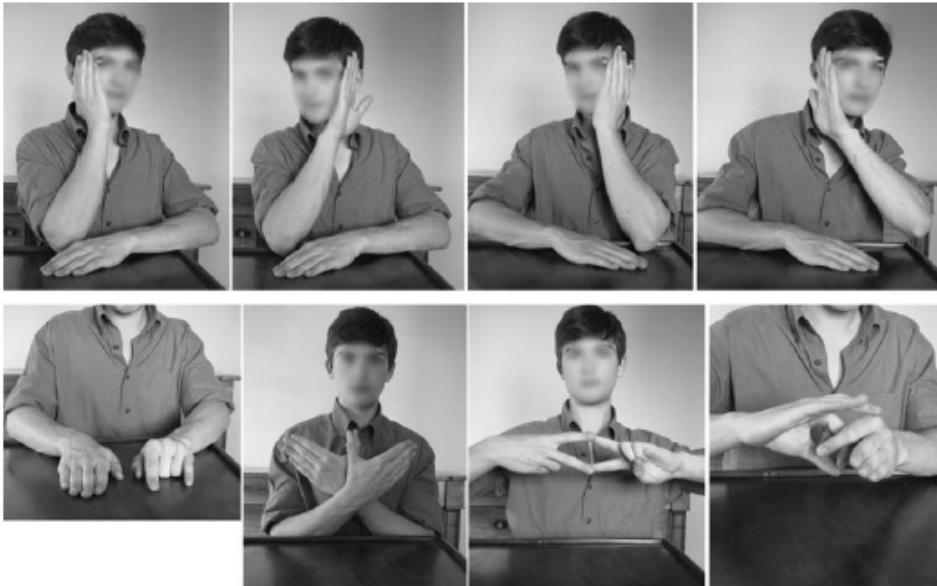


Figure No.1: Meaningless gestures

3. Instructions:

❖ Symbolic praxis gestural capabilities:

"How do you use the hand (the finger) to..."

❖ Praxis gestural capabilities action mimes:

"Imagine that you are holding a ... in your hand..., show me the gesture you make to..."; We can specify: *"here is a (pretend to give the object), show me the gesture you would make for..."* in the event of a body-as-object response, we can remind the participant of the initial instruction or say: *"Show me how you hold the ...?"*

❖ Abstract gestures:

"I'm going to ask you to perform exactly the same gesture as I do, with the same hand as me, that is, with your right hand if I do it with my right hand and with your left hand if I do it with my left hand"

VI. Trail Making Test: Part A

1. Objectives

This test is a psychomotor test of visual searching to explore attention capabilities. It consists of two parts, A and B. In Part A, the task assigned to the participant is relatively simple. In part B, it is more complex.

2. Time for conducting the test

Part A: maximum time 3 minutes.

3. Material

- Timer
- A pencil for the participant
- “Example A” sheet
- “Part A” sheet

4. Information for the participant

Show the example sheet to the participant and say *“On this sheet, you can see circles in which are written the number 1 to 8. Using this pencil, can you join the circles in line with the increasing order of the numbers, that is, from 1 to 2, 2 to 3 and so on. You must keep the point of the pencil on the sheet during the entire test: you cannot lift it up. Also I would ask you to work as quickly as possible, but without making mistakes. Are you ready? Off you go!”*

Do not time the example. In the example emphasize the instructions well, make sure that the participant has fully understood what is being asked of him before starting Part A (if necessary, the instructions can be repeated or rephrased).

PART A

When the participant has understood, present him with the test sheet and tell him:

“We are now going to begin the test. On this sheet you will see numbers going from 1 to 25. The place where you have to start the test is indicated there (point to “start”), and here is the place where the test ends (point to “end”). In the same way you have to join the numbers up in ascending order while keeping the pencil on the paper throughout the test. Work as quickly as possible, but without making mistakes. Are you ready? Off you go!”

Start the timer. If the participant makes a mistake, point it out to him immediately and ask him to resume (without stopping the timer) from where he made the mistake. In the event of an error, it is advisable to check that the participant can count up to 25.

Note: stop the timer after 3 minutes even if the participant has not completed the test.

5. Scoring:

Note:

- the total time for the test (in seconds)
- the number of correct moves (**maximum 24**)
- the number of self-corrected errors
- the number of uncorrected errors

VII. Trail Making Test: Part B

1. Objectives

This test assesses perceptual-cognitive-motor speed and mental flexibility capacities.

2. Time for conducting the test

Part B: maximum time 5 minutes.

3. Material

- Timer
- A pencil for the participant
- “Example B” sheet
- “Part B” sheet
- Information for the participant:

Show the example sheet to the participant and say: *“On this sheet, as before, you will find numbers but also letters of the alphabet. You also have to work here in ascending order, but by alternatively connecting a number then a letter, then the second number and the second letter, and so on. For example, on this sheet, you should connect the first number (1) with the first letter (A), the first letter (A) with the second number (2), the second number (2) with the second letter (B), and so on. You must always keep the point of the pencil on the paper and work as quickly as possible without mistaking a mistake. Ready? Off you go!”*

Do not time the example. In the example emphasize the instructions well, make sure that the participant has fully understood what is being asked of him before starting Part B (if necessary, the instructions can be repeated or rephrased).

When the participant has understood, present him with the test sheet and tell him:

“We are now going to begin the test. As on the previous sheet, there are numbers and letters. The numbers go from 1 to 13, and the letters from A to L. The beginning and the end (show) are indicated. So you have to connect the numbers and the letters alternately, in ascending order. You must always keep the point of your pencil on the paper and work as quickly as possible without mistaking a mistake. Are you ready? Off you go!”

Start the timer. If the participant makes a mistake, point it out to him immediately and ask him to resume (without stopping the timer) from where he made the mistake.

If the participant has made a mistake in Part B, you must make sure that this error is not due to an imperfect knowledge of the alphabet; in order to do this, you must ask the participant (but only in event that an error has been made in part B) to recite the alphabet (from A to L).

Note: stop the timer after 5 minutes even if the participant has not completed the test.

4. Scoring:

Note:

- the total time for the test (in seconds)
- the number of correct moves (**maximum 24**)
- the number of self-corrected errors
- the number of uncorrected errors
- the number of perseverative errors (when the participant goes from a number to another number or from a letter to another letter)

VIII. Digit span number recall: forward

Say: *"I'm going to read you out some numbers. Listen carefully and when I've finished, repeat them exactly as I have read them out."*

Read each sequence of numbers on the sheet of the process notebook. Read the numbers at the rate of one per second, lowering the tone of your voice for the last one in each series.

Continue with the Numbers - Forward items, following the sequences on the sheet of the process notebook. Log the participant's answers. When the participant fails with both attempts for the same item (stop rule) or when all of the Numbers - Forward items have been covered, move on to conducting the Recall of Numbers - Backwards test.

Stop rule: Failure (score = 0) in 2 attempts for the same item.

IX. Digit span number recall: backwards

Say: *"Now I'm going to read you some numbers, but this time, when I've finished, you will repeat them backwards. For example, if I say 7-1-9, what should you say?"*

If the participant answers correctly (9-1-7) say: *"That's good"* and move to Test 1 of Item 1.

If the participant does not answer the example correctly, give him the answer by saying: *"No, I said 7-1-9, so to repeat them backwards you should have said 9-1-7. Let's try with some other numbers. Remember that you have to say them backwards: 3-4-8"*.

Do not help the participant with this second example. Whether he is successful or not with the second example (8-4-3), move on to Test 1 of Item 1. Continue with the Number Recall Backwards items, following the sequences in the process notebook. Log the participant's answers.

Stop rule: Failure (score = 0) in 2 attempts for the same item.

Once the reverse order repetition exercise has been completed, add up the total score for forwards and backwards and fill in the total in the process notebook.

Next, determine the participant's standard score based on this total and the participant's age by referring to paragraph V of the annex, then fill in the standard score in the process notebook.

X. Rey complex figure test: copy

1. Objective

This test explores the capacities for perceptual analysis and visual memory.

The figure used for the test, called Rey's complex figure, does not represent anything.

2. Time of process

About 5 minutes.

3. Specific material:

- Timer
- Sheet with Rey's figure
- Pencil

4. Information for the participant:

We present the drawing horizontally (with the small end diamond on the right, pointing downwards).

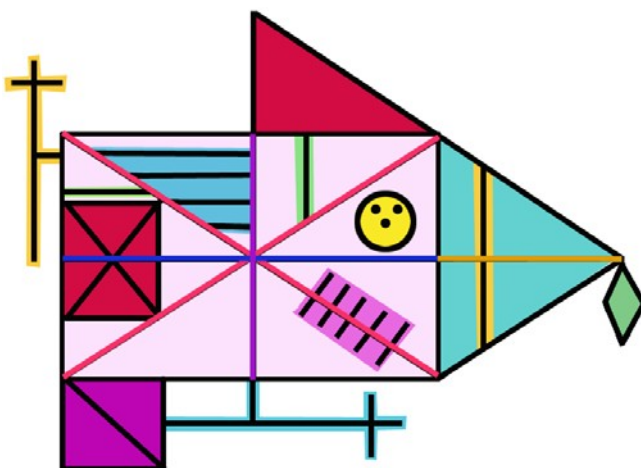
“Here is a drawing: you are going to copy it on to this sheet; it is not necessary to make an exact copy; however you need to pay attention to the proportions and especially don't leave anything out. There is no need to rush.”

Provide a pencil and time the exercise discreetly. There is no time limit for the reproduction; the participant himself indicates when he considers that he has finished.

5. Scoring:

The graphic below shows the division of the REY figure into 18 units numbered as follows:

- | | |
|---|---|
| 1. The exterior cross | 10. The small perpendicular just underneath |
| 2. The large rectangle | 11. The circle with its three dots |
| 3. The cross formed by the 2 diagonals | 12. The 5 hatch lines in the lower right corner |
| 4. The horizontal median | 13. The isosceles triangle at the end |
| 5. The vertical median | 14. The small diamond |
| 6. The small inner rectangle with its two diagonals | 15. The segment inside the isosceles triangle |
| 7. The small segment above it | 16. The extension of the horizontal median |
| 8. The 4 hatch lines | 17. The lower cross |
| 9. The upper right triangle | 18. The lower left square |



The same value is given to all these simple or complex units, but as they can be reproduced correctly or slightly distorted, correctly placed or incorrectly placed in the graphic, the scoring is as follows:

Per unit	Correct	Correctly placed: 2 points:
		Incorrectly placed: 1 point
	Distorted or incomplete but recognisable	Correctly placed: 1 point
		Incorrectly placed: 1/2 point
Unrecognisable or missing	0 points	

XI. Free and cued selective reminding test: 20 mins

1. Specific material

- Timer

2. Information for the participant

This recall takes place twenty minutes after the recognition phase.

The instructions are as follows: *“Earlier, I showed you a list of words on 4 cards, and I asked you to memorise them. Can you remember as many as you can for me, in any order? You have two minutes to do this.”* The participant has 2 minutes to remember the words.

During the recall, the wrong and repeated words are not indicated to the participant (but they are noted in the process notebook).

For the cued recall the instructions are as follows: *“You could not remember certain words (and/or some were not correct) so I suggest you try to find them again. On the cards that I showed you earlier, what was the (...) (name of the category)?”*

Allow 10 seconds per item for the cued recall.

3. Score

You should identify:

- the number of correct recollections in free recall (DFR)
- the number of correct recollections in cued recall (DCR)
- the total number of correct recollections (DTR)

XII. Rey complex figure test: 3 mins

1. Information for the participant

Present a blank sheet of paper to the participant:

“You remember the drawing you copied a few minutes ago, well now can you try to draw it again from memory?”

Provide a pencil and time the exercise discreetly.

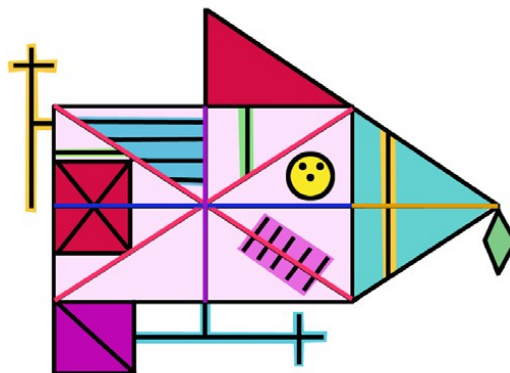
There is no time limit for the reproduction; the participant himself indicates when he considers that he has finished.

2. Scoring:

To assess the results of the reproduction from memory after the copy, we retain the same variables as for the initial phase of the test.

The graphic below shows the division of the REY figure into 18 units numbered as follows:

1. The exterior cross	10. The small perpendicular just underneath
2. The large rectangle	11. The circle with its three dots
3. The cross formed by the 2 diagonals	12. The 5 hatch lines in the lower right corner
4. The horizontal median	13. The isosceles triangle at the end
5. The vertical median	14. The small diamond
6. The small inner rectangle with its two diagonals	15. The segment inside the isosceles triangle
7. The small segment above it	16. The extension of the horizontal median
8. The 4 hatch lines	17. The lower cross
9. The upper right triangle	18. The lower left square



The same value is given to all these simple or complex units, but as they can be reproduced correctly or slightly distorted, correctly placed or incorrectly placed in the graphic, the scoring is as follows:

Per unit	Correct	Correctly placed:	2 points:
		Incorrectly placed:	1 point
	Distorted or incomplete but recognisable	Correctly placed:	1 point
		Incorrectly placed:	1/2 point
Unrecognisable or missing	0 points		

XIII. Frontal assessment battery (FAB)

1. Similarities (conceptualisation)

"In what way are they similar?"

- "A banana and an orange..." (in the event of failure, say to the participant: "A banana and an orange are ...", do not count, do not help the participant for the other two items)
- "A table and a chair..."
- "A tulip, a rose and a daisy..."

Score: One point per similarity, maximum of 3 points.

2. Lexical fluidity (mental flexibility)⌚: 60 seconds:

"Say as many words as you can beginning with the letter S, any word is OK except for proper nouns or first names".

If the participant does not say any words during the first 5 seconds, say *"For example, snake..."*. If he stops for 10 seconds, prompt him by saying *"any word starting with S..."* Time allocated: 60 seconds

Score: Count the number of words produced by the participant. Repeated or equivalent words (*sand* and *sable-mouvant*) as well as first names or proper names are not counted

3. Prehension behaviour (environmental autonomy):

"Do not take my hands."

You are seated in front of the participant. Place the participant's hands on his lap, with the palms facing up. Without saying anything and without looking at the participant, the examiner brings his own hands close to the participant's hands and touches the palms of both of the participant's hands to see if he will spontaneously take the examiner's hands. If the participant does spontaneously take them, the examiner does the same thing again and says *"Now, do not take my hands"*.

Score: - **3 points**: The participant does not take the examiner's hands

- **2 points**: The participant hesitates and asks what he should do
- **1 point**: The participant takes the examiner's hands without hesitation
- **0 points**: The participant takes the examiner's hands even at the second attempt

4. Motor sequences (programming):

"Watch carefully what I do".

You are seated in front of the participant, perform the Luria series with his left hand three times (fist - edge - palm of the hand).

"Now, with your right hand, perform the same series, first with me and then on your own."

You perform the series three times with the participant and then say: *"Now, do it on your own"*.

Score: - **3 points**: The participant performs six series correctly on his own

- **2 points**: The participant performs at least three series correctly on his own
- **1 point**: The participant is unable to do it on his own but performs three series correctly with the examiner
- **0 points**: The participant cannot perform three series correctly even with the examiner

5. Conflicting instructions (sensitivity to interference):

“Tap twice when I tap once.”

To ensure that the patient has understood the instruction, a series of 3 trials is performed: 1-1-1.

“Tap once when I tap twice.” To ensure that the patient has understood the instruction, a series of 3 trials is performed: 2-2-2. The examiner then performs the following series: 1-1-2-1-2-2-2-1-1-2.

Score: - **3 points:** No errors

- **2 points:** One or two errors
- **1 point:** More than two errors
- **0 points:** The participant taps like the examiner 4 consecutive times

6. Go–No Go (inhibitory control):

“Tap once when I tap once.”

To ensure that the patient has understood the instruction, a series of 3 trials is performed: 1-1-1.

“Do not tap when I tap twice”. To ensure that the patient has understood the instruction, a series of 3 trials is performed: 2-2-2. The examiner then performs the following series: 1-1-2-1-2-2-2-1-1-2.

Score: - **3 points:** No errors

- **2 points:** One or two errors
- **1 point:** More than two errors
- **0 points:** The participant taps like the examiner 4 consecutive times

XIV. Semantic verbal fluency: animals

1. Objective

This test assesses the ability to evoke words quickly.

2. Time of process

About 3 minutes.

3. Specific material

- Timer

4. Information for the participant

Instructions: *“You will have to tell me as many names as possible that you know in the category that I am going to give you without names of the same family and without repetitions... For example, for the flowers category, you can say to me: Rose, Dahlia, Violet.*

Do you understand?” Off you go!”

When you are sure that the participant has understood, you say to him: *“Tell me as many names of animals as possible”.*

Then start the timer. The allocated time is 120 seconds. In case of an infringement of the rule (for example, the participant gives words from another category), remind him of the instructions: *“Careful, you can only say names of animals”.*

5. Scoring

Count the total number of words produced by the participant and record this in the process notebook in the box provided for this purpose.

Also count the number of repetitions and intrusions (word from another category).

For the final score do not count repetitions, intrusions, redundancies (such as “a white cow”, “a brown cow”), or proper names like “Bambi”, “Rintintin”.

For names specific to sex and age, **only words with different roots are accepted:**

Example: “*sanglier*”, “*laie*”, “*marcassin*” - in this case each word counts; on the other hand, for “*chien*”, “*chienne*” and “*chiot*” we will only count one word.

Extra-category responses are accepted if named on their own, for example: “bird” will count if no bird name is named afterwards, but if the participant says “bird”, “swallow”, “seagull”, “tit”, “bird” will not be counted, even where the declension of the extra-category response does not appear immediately after the production of the word “bird”.

XV. DMS 48: 1 hour

1. Specific material

The image set 2.

2. Information for the participant

The instruction is as follows: *“Just now I showed you some pictures. I will now show you pairs of images again. There is one that you've seen before and another that you've never seen before. I will ask you to show me the one you've seen before.”*

This part is also timed. You should show the first pair of images, note the participant's answer on the score sheet and move on to the second pair and so on.

Do not correct the participant if he makes a mistake. A reminder of the instruction or any other form of prompt may be used; *“Look well at both images before you answer”*.

It is necessary that you obtain an answer, even if the participant does not know how to answer (answer through a forced choice), with the help of prompts such as: *“In your opinion?” “Just on the off chance what would you choose?”*, *“Do you prefer A or perhaps B”* etc...

3. Score

Count the number of correct answers and log it at the bottom of the results table.

XVI. Oral image naming test (DO 80)

1. Specific material

- Folder of images.

2. The instructions for the process

Be careful to respect the order of the images, it was established in such a way as to avoid a succession of elements of the same semantic category, such as “boot” and “sabot”; or with some similarities either in the drawing (“snake” and “skipping rope”), or in the form of the word (“balai” and “balance”). In addition, attempts have been made to obtain a distribution of the characteristics of the frequency and length of the words which is relatively uniform over the entire test.

Say: *“I’m going to show you some pictures. On each occasion you watch carefully and you just tell me what it’s called. You have plenty of time, but as there are still a lot of images, be brief and precise. Please only give me one name at a time.”*

Self-corrections are only allowed if they are spontaneous. Any answer which differs from the core answer should be transcribed on the sheet in the process notebook. In cases of non-dictionary productions such as phonemic paraphasias or neologisms, the examiner should transcribe them phonetically.

3. Score:

The clinical scoring is then as follows:

- ✓ allocate one point for any answer that contains the name of the image. Thus, the answer “*bowler hat*” for the item whose core answer is “*hat*” will be deemed to be correct since it includes the word “*hat*”. But the answer “*felt*” is then treated as an error, as are “*viper*” and “*adder*” for the image whose core response is “*snake*”.
- ✓ also award a point for an answer such as “*hachette*” because it contains the same lexical root as the core response to “*hache*”.
- ✓ comments and other methods that do not lead to the production of a lexical naming element are considered non-responses and zero-rated.
- ✓ score zero for neologisms and phonemic paraphasias. However, for the latter, we can perform a complementary qualitative analysis and distinguish those that only change the core response a little (such as “*tapuRe*” to refer to a “*tabouret*”) from those more pathological ones that are combined with a semantic error (“*ganapa*” (transformation of *canapé*) to designate a “*tabouret*”).
- ✓ any other type of response will be scored zero.

Taking into account the exposed scoring system, the DO 80 score is simply the number of correct answers across all 80 test images.

SCALES AND QUESTIONNAIRES

Clinical Dementia Rating Scale (CDR)

Clinical Dementia Rating questionnaire®

This is a semi-structured interview.

Please ask all of the questions (as well as any additional questions necessary for determining the participant's CDR score).

Please note the information obtained from these additional questions.

Please only enter the final score ("Total Score" located on the last page of the questionnaire)

Neuropsychiatric Inventory (NPI) Original (NPI) and Clinician-rated (NPI-C)

GLOSSARY

- A domain includes all the items of a given clinical dimension (for example: apathy).
- An item corresponds to a sub-question.

INSTRUCTIONS

Fourteen behavioural domains are taken into account in the NPI-C (C for Clinician). The original NPI only takes into account 12 behavioural domains which are included in the NPI-C.

The NPI-C can be used:

- to gain an overall assessment of the presence of neuropsychiatric symptoms across various domains, as is the case with the original NPI,
- as an evaluation "per se", to specifically assess a neuropsychiatric domain, as if you were using a specific scale for a given neuropsychiatric symptom, this is the case for the NPI-C,
- by combining the two formulas (assessment of the presence of different domains plus a particular focus on one or more specific domains). This is the formula that is used for MEMENTO with:
 - a "per se" assessment for three domains (anxiety, dysphoria, apathy),
 - an overall assessment for all the domains.

Here are the instructions for completing each of the NPI/NPI-C sections used in MEMENTO: interview with the accompanying person, and evaluation by the clinician.

✓ **Experience of the Clinician**

The original version of the NPI-C emphasises that it is essential that every clinician who uses the NPI-C Clinical assessment has a minimum of 2 years experience dealing with neuropsychiatric symptoms.

The person conducting the assessment should be a doctor or a psychologist.

✓ **Interview with the accompanying person (original NPI overall assessment)**

In MEMENTO, the interview with the accompanying person follows the rules of the original NPI. To complete the original NPI start by reading the selection questions at the top of the page to the accompanying person.

- If the accompanying person answers “**Yes**”, use the sub-questions and ask the accompanying person to answer “Yes” or “No”. Circle the items for which the accompanying person has answered “Yes”. Then ask the accompanying person to revisit all the items for which he has answered “Yes” and to evaluate overall the frequency and severity for the whole domain (the single score for the NPI domain is the product of (frequency x severity)).
- If the accompanying person answers “**No**” go to the next domain and only show 0 for the “frequency” score and 0 for the “severity” score.

Read out all the items in a literal way. The questions are generally clear and easy to understand. If the accompanying person is not sure how to respond and asks for explanations, repeat the question as written and ask the accompanying person to give the best answer possible. The accompanying person must provide an answer for the assessment of the frequency, of the severity for each of the domains by using the scoring grid.

It is important to remember that the symptoms assessed relate to the disorders occurring during a defined period of time (the last four weeks).

✓ **Clinician’s evaluation (clinician evaluation of the three domains. anxiety, dysphoria, apathy)**

The clinician's evaluation is an assessment of the **severity** based on all the clinical data (example: medical record, personal observations, personal experiences) and the information provided by the interviews with the participant and the accompanying person. You can talk to the accompanying person and/or the participant again in order to clarify a specific question or to obtain additional information that may help you better understand the severity of a given item. The clinician's evaluation of the severity may of course differ from that of the accompanying person.

In MEMENTO this evaluation should be used for three specific domains: anxiety, dysphoria, apathy.

You use the “per se” assessment of a specific area and the clinician must evaluate all the items in the domain irrespective of the answer to the selection question (Yes or No) (the domain score (total severity score) is the sum of the clinical evaluations of each item (severity score between 0 and 3 for each item in the 3 domains concerned)).

In practical terms, you are asked to fill in:

- **firstly, as far as possible, the original overall NPI by interviewing the accompanying person. If no accompanying person present at the visit, contact an informing party by phone.**
- **then fill in the NPI-C for the 3 domains, dysphoria, anxiety and apathy (severity score assessed by the clinician).**

D. DYSPHORIA

Does (S) seem sad or depressed? Does (S) ...

For the NPI:
1- Tick Yes/No to answer the domain question put to the accompanying person
Do not take account of the selection question for the NPI-C

(✓) No Yes

✓ if Yes	Description	Informant*		Clinician *
		Frequency 0-4	Severity 0-3	Severity 0-3
	1. Does (S) have a sad or worried expression?			<input type="checkbox"/>
	2. Does (S) seem sad or in low spirits?			<input type="checkbox"/>
	3. Does (S) put a pessimistic or negative expression?			<input type="checkbox"/>
	4. Does (S) seem very discouraged or say he/she has no future?			<input type="checkbox"/>
	5. Does (S) say he/she is a burden to the family and that the family would be better off without him/her?			<input type="checkbox"/>
	6. Does (S) express a wish for death or talk about killing him/herself?			<input type="checkbox"/>
	7. Does (S) say that he/she is a bad person and deserves to be punished?			<input type="checkbox"/>
	SCORE NPI	<input type="checkbox"/>	<input type="checkbox"/>	
	8. Does (S) have a worried or pained expression?			<input type="checkbox"/>
	9. Is (S) pessimistic or overly negative, expecting the worst?			<input type="checkbox"/>
	10. Is (S) suddenly irritable or easily annoyed?			<input type="checkbox"/>
	11. Has (S) changed in his/her eating habits, such as eating more/less or more/less often than usual?			<input type="checkbox"/>
	12. Does (S) talk about feeling guilty for things that for which he/she had no control over?			<input type="checkbox"/>
	13. Does (S) seem to no longer enjoy previously enjoyable activities?			<input type="checkbox"/>

For the NPI:
If answered "Yes" to the domain question:
2- Ask all the questions "items" to the accompanying person and circle the answered items "Yes"
If answered "No" to the domain question:
2- Move to the next domain

For the NPI:
3- Ask the accompanying person for an overall score for the items answered "Yes"

4- Record the assessment of the severity by the clinician for all the items and for the 3 requested domains required by the NPIC: apathy, dysphoria and anxiety **and irrespective of the answer given by the accompanying person to the selection question**

*Do not leave blank. Enter "0" if it does not occur

NPI SCORING GRID

All the answers relate to behaviours occurring during the last four weeks

Frequency

1. **Never**
2. **Sometimes:** less than once a week
3. **Quite often:** about once a week
4. **Frequently:** several times a week but not every day
5. **Very frequently:** every day or almost all the time

Severity

1. **Absent**
2. **Light:** produces little disturbance in the participant
3. **Medium:** disturbing for the participant and resulting in significant behavioural abnormalities
4. **Significant:** major source of behavioural abnormalities

Evaluation of the instrumental activities of daily living (IADL)

Source: Lawton's scale

This scale should be completed by a member of medico-social staff using one or more of the following sources of information: the participant, his family, his friends. Give the answer “not applicable” when the participant has rarely, if ever, had the opportunity to perform the activity in question (for example, a male participant may have never done the laundry). When you have no information or uncertain information, record “Cannot be scored”.

Evaluation of the activities of daily living (ADL)

Source: Katz Index

General guidelines

- The evaluation concerns **the activities actually performed** by the participant.
- A participant who does not perform the activity described (even if he considers himself capable of doing so) is considered as dependent for this activity.
- The degree of dependence assessed is the one at the time of the interview.
- **If an informing party is present during the interview, the participant's answers may be corrected by the informing party if necessary. In that case tick the box “completed by the participant with the help of an associate”.**
- **- If the questionnaire is completed with the participant only, note what the participant tells you. If you have any doubt about the validity of the answers, note this in a comment, without correcting the scale. Only correct the scale if there is evidence that the statement is false.**
- The reference to assistance for an activity relates to:
 - active help by a third person,
 - directive assistance,
 - simple monitoring, if this monitoring is actual (not the mere presence of a person in another room in the house).

For participants temporarily unable to perform the activities, the current status of the participant should be considered, and it is noted that this status has been present for less than 3 months.

Short Physical Performance Battery (SPPB)

The SPPB is a composite functional score.

It corresponds to the sum of the performances obtained during tests for balance (standing balance test), strength (successive getting up from a chair) and walking (walking speed over 4 metres).

This score gives an overall idea of the functional status of an elderly person.

Where to perform the test:

You should conduct this test in an area where opportunities for distraction are rare and, above all, frequented by few people. You will need a wall nearby where you can place a chair and also an unobstructed corridor where you can mark out a distance of 4 metres for the participant's walking test.

Equipment needed:

Balance test:

- Timer

Speed of walking

- Timer
- Before the participant's first test:
 - coloured tape to indicate where to start and finish
 - measuring tape or device to measure a distance of four metres

Getting up from a chair:

- Timer
- Chair with straight backrest with no armrest

General notes:

- The balance test consists of three tests of increasing difficulty (the support base becomes increasingly narrow).
- If the participant cannot complete a test, record the reason, stop the balance tests, and move on to the walking speed test.
- All tests are done with the eyes open. The participant can move his arms in order to steady himself, but must not hold on to an object or a person.
- Walking aids are not allowed during the balance tests.
- The participant must be wearing socks or be barefoot.
- The participant will only have to try to maintain each position once, so it is important that you explain to him in detail the purpose of the assessment, that you show him each position and that you help him to adopt the correct position.
- The person conducting the test should stand immediately behind the participant to get him in position for the test and to prevent him from falling.

Interpretation:

The total score ranges from 0 to 12 points. Participants with a score between 10 and 12 are considered to have good performance; those whose scores are between 7 and 9, as having average performance; and those whose scores are between 0 and 6 as having poor performance.

INSTRUCTIONS

1. GAIT SPEED TEST:

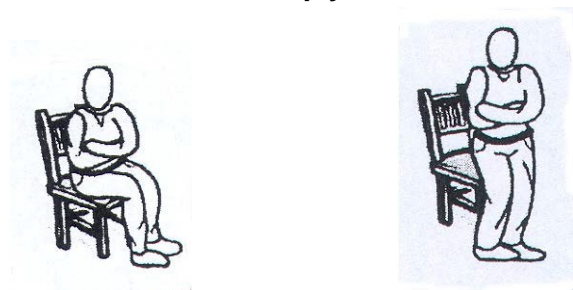
“This is our walking test. If you use a cane or another form of assistance to walk when outside your home, please use it for this test. I want you to walk at your usual pace to the other marker. You should walk without stopping until you reach the other marker. I will walk with you. Are you ready?”

Instruction: Start the timer when the participant starts walking. Measure the time

2. GETTING UP FROM A CHAIR TEST:

1. *“Now we will move on to the second movement test. Do you think that you could safely try to get up from a chair five times in a row without using your arms?”*

2. (Show and explain the test). **You have to get up five times in a row as QUICKLY as you can, without stopping. After getting up, you sit down and then get up again each time. You should keep your arms crossed on your chest. I will time you.**



3. When the participant is properly seated, say: **“Ready? Up you get”**, and start the timer.

4. Count aloud each time the participant sits down again, up to five.

5. Stop the test if the participant becomes tired or falters.

6. Stop the timer when the participant is fully seated for the fifth time.

7. Also end the test:

- If the participant uses his arms
- After one minute if the participant has not stood up fully
- At your discretion
- if you think the participant is at risk.

8. If the participant stops and appears tired before having stood up five times, ask him to confirm by asking: **“Are you OK to continue?”**

9. If the participant says “Yes”, continue timing. If the participant says “No”, stop the timer and reset it to zero.

3. BALANCE TESTS:

The participant must be able to remain standing up without assistance or a walking stick or walking frame.

You can help him to get up.

State the following instructions:

Let's start the tests now.

I am going to ask you to try to make various movements.

First I will describe each movement and then I will show it to you.

I will then ask you to try to do it.

If you cannot perform a particular movement, or if you think it would be risky to try to do it, tell me and we'll move on to the next movement. I would like to emphasise that I do not want you to try to do any movement if you think there is a risk.

Do you have any questions before we start?

1/ STANDING FEET TOGETHER

I'll now show you the first movement.



(show) I'm going to ask you to try to stay standing with one foot against the other for around 10 seconds.

You can use your arms, bend your knees or move your body to keep your balance, but try not to move your feet. You will try to maintain this position until I tell you to stop.

Stay close to the participant to help him to stand with his feet together.

Support the participant lightly by the arm but only so that he doesn't lose his balance.

When the participant has moved his feet together, ask **"Are you ready?"**

Then start the timer. **"Ready, begin."**

Stop the timer and say **"Stop"** after 10 seconds, or when the participant moves his feet or takes your arm.

If the participant cannot maintain the position for 10 seconds, record the result and move on to the walking speed test.

2/ SEMI-TANDEM STANDING TEST



I'll now show you the second movement.

(Show) I'm going to ask you to try to stay standing with the side of the heel of one foot touching the big toe of the other foot for around 10 seconds. You can put either foot forward, the one that is most comfortable for you.

You can use your arms, bend your knees or move your body to keep your balance, but try not to move your feet. You should try to maintain this position until I tell you to stop.

Stay near the participant in order to help him adopt the semi-tandem stand position.

Support the participant lightly by the arm but only so that he doesn't lose his balance.

When the participant has moved his feet into position, ask **"Are you ready?"**

Then start the timer. **"Ready, begin."**

Stop the timer and say **"Stop"** after 10 seconds, or when the participant moves his feet or takes your arm.

If the participant cannot maintain the position for 10 seconds, record the result and move on to the walking speed test.

3/ TANDEM STANDING TEST



I'll now show you the third movement.

(Show) I'm going to ask you to try to stay standing with the side of the heel of one foot in front of the other foot, for around 10 seconds. You can put either foot forward, the one that is most comfortable for you.

You can use your arms, bend your knees or move your body to keep your balance, but try not to move your feet. You should try to maintain this position until I tell you to stop.

Stay near the participant in order to help him adopt the tandem standing position.

Support the participant lightly by the arm but only so that he doesn't lose his balance.

When the participant has moved his feet into position, ask **“Are you ready?”**

Then start the timer. **“Ready, begin.”**

Stop the timer and say **“Stop”** after 10 seconds, or when the participant moves his feet or takes your arm.

International Physical Activity Questionnaire (IPAQ)

French version - July 2003

The instructions to say to the participant are as follows:

*“We are interested in the different types of physical activities that you do in your day-to-day life. The following questions relate to how much time you have spent being physically active over the **last 7 days**. Answer each of these questions even if you do not consider yourself to be an active person. The questions relate to physical activities that you do at work, in your home or your garden, for your trips, and during your free time.”*

Stress Response Rating Scale (SRRS)

INSTRUCTIONS FOR THE CLINICIAN

Identification of life events that have occurred during the last 6 months.

Different life events grouped into 7 major categories are listed in the following table.

The purpose of this questionnaire is to identify the life events that the participant may have experienced over the last 6 months and to assess their impact.

The following procedure describes how the questionnaire should be presented to the participant:

“I am now going to ask you about events that you are currently experiencing or may have experienced in the last 6 months. You will not have experienced some of the events in this list. However, whenever there is an event that has happened to you, I will ask you to assess its impact, in other words to what extent you found this event to be disruptive or upsetting for you.”

☞ The participant must now be shown a piece of paper indicating the various levels of impact.

LEVELS OF IMPACT

- 0: No impact
- 1: “Minimal” impact
- 2: “Light” impact
- 3: “Moderate” impact
- 4: “Severe” impact
- 5: “Very severe” impact