



ENSURING SPEECH UNDERSTANDING for TELEPHONE FORM



ID
NUMBER:

FORM CODE:

DATE: 04/30/2020
Version 1.0

ADMINISTRATIVE INFORMATION

0a. Completion Date: / /
Month Day Year

0b. Staff ID:

Instructions: Read each sentence slowly (~3 seconds) articulating clearly with normal inflections. No repetitions are allowed. Circle and sum the WORDS IN ALL CAPS (excluding 'A') that are repeated correctly.

If a test was discontinued, record the reason for discontinuation using the appropriate letter:

A = Refusal (participant declines/refuses to perform a test)

B = Task difficulty (participant could not fully understand the instructions or became frustrated)

C = Physical impairment (aphasia or hearing loss)

D = Telephone connection (poor quality, dropped calls, echo, etc.)

E = Distractions (background noise like TV, radio, other voices, etc.)

F = Interruptions (people, pets, kids, etc.)

G = Inappropriate aid (clocks, calendars, writing down answers, help from others)

H = Participant became fatigued

I = Other (note in notelog)

Script: "Listen carefully, because I am going to read you several sentences. After I read each sentence, please repeat it back to me. The first sentence is..."

| | CHECK IF DISCONTINUED | REASON FOR DISCONTINUATION | SCORE |
|--|--------------------------|---------------------------------------|---|
| 1. Audibility Trial 1 | <input type="checkbox"/> | a. <input type="checkbox"/> | |
| <div style="border: 1px solid black; padding: 5px;"> <p>If total score for Trial 1 is ≥ 13, save and close form and proceed with neurocognitive testing.</p> <p>If total score for Trial 1 is < 13, proceed with Trial 2 and: a) use a louder tone of voice, and b) if the ppt is using a cell phone, check to see if the volume can be increased and if they can hold the speaker closer to their ear.</p> </div> | | b. The PLAYER LOST the SHOE | <input type="checkbox"/> |
| | | c. The FIRE is VERY HOT | <input type="checkbox"/> |
| | | d. A LADY WORE a COAT | <input type="checkbox"/> |
| | | e. The KITCHEN WINDOW was CLEAN | <input type="checkbox"/> |
| | | f. STRAWBERRY JAM is SWEET | <input type="checkbox"/> |
| | | g. Total Score: | <input type="text"/> <input type="text"/> |
| 2. Audibility Trial 2 | <input type="checkbox"/> | a. <input type="checkbox"/> | |
| <div style="border: 1px solid black; padding: 5px;"> <p>Regardless of the score for Trial 2, if based on your interactions up to this point some reasonable communication seems possible, proceed with the testing and discontinue due to hearing loss (or other applicable reason) as needed. Speak as loudly and as distinctly as possible.</p> </div> | | b. The BOOK TELLS a STORY | <input type="checkbox"/> |
| | | c. The TEAM is PLAYING WELL | <input type="checkbox"/> |
| | | d. A BOY DID a HANDSTAND | <input type="checkbox"/> |
| | | e. MOTHER OPENED the DRAWER | <input type="checkbox"/> |
| | | f. The FISH SWAM in a POND | <input type="checkbox"/> |
| | | g. Total score: | <input type="text"/> <input type="text"/> |

If, in the examiner's judgement, communication is so severely limited such that all tests would likely be discontinued due to hearing loss or would produce severely biased cognitive test results, then the call may be ended at this point. Say: **"Thank you very much Mr./Mrs. _____ , but you may not be able to hear me well enough to complete the memory and thinking tasks over the phone, so I will not continue at this time. On behalf of the ARIC study, thank you for taking time to speak with me today."**



MME/CDP Hybrid for Telephone Form



ID
NUMBER:

FORM CODE: MCHT

DATE: 05/22/2020
Version 1.0

ADMINISTRATIVE INFORMATION

0a. Completion Date: //
Month Day Year

0b. Staff ID:

Materials: Black pen, clock/watch with current time (to score 0f)

Scoring note:

Items which are not attempted for any reason other than cognitive impairment (e.g., refusal, hearing loss, telephone connection, etc.), should be marked as "Not Attempted."

Items which are not administered due to cognitive impairment should be marked as "Incorrect."

"In this next part, I will ask you some questions that will require memory and concentration. Some may seem a little easier than others."

| | Correct | Incorrect / Don't know | Not Attempted/ Refused |
|---|----------------------------|----------------------------|----------------------------|
| 0c. What is your full name? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 0d. How old are you? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 0e. What is the full date of your birth? <i>If PPT is on a cellphone, ask them to turn their phone over during the next few questions.</i> | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 0f. Without looking at a clock or watch, what is the approximate time of day? <i>Score as correct, if within one hour of the actual time.</i> | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |

| | Correct | Incorrect / Don't know | Not Attempted / Refused |
|--|----------------------------|----------------------------|-------------------------------|
| 1. What year is this? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 2. What season is this? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <i>Winter: Dec., Jan., Feb., March</i> <i>Spring: March, April, May, June</i> <i>Summer: June, July, August, Sept.</i> <i>Fall/Autumn: Sept., Oct., Nov., Dec.</i> </div> | | | |
| 3. What month is this? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <i>Score as correct if within one day of the actual month.</i> | | | |
| 4. What is the day of the week? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <i>If the participant gives the date instead of the day, give credit for date if correct, and say: "Good, and what day of the week is it?"</i> | | | |
| 5. What is the date? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 6. What state do you live in? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 7. What city do you live in? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 8. What county do you live in? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| 9. What is your home address (street or apt #)? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <i>Score #10 as correct if full (and accurate) street address is given.</i> | | | |
| 10. If not stated on #9: What is the name of the street you live on? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |

Items 11a to 15 below are scored per the CDP protocol (CDP items 15a-19). If the initial response by the participant does not merit a grade 0, prompt one time to identify the subject's best understanding of the problem. Indicate nearest response.

Similarities: "Now, I'm going to ask you how two things are alike. For example, if I asked you how a pen and a pencil were alike, you might say they both write. Please tell me how a (insert word) and a (insert word) are alike?"

11. Can you tell me how these things are alike?
- a. turnip ----- cauliflower
- ☐ 0= Vegetables ☐ 1= Edible foods, living things, can be cooked, etc. ☐ 2= Answers not pertinent; differences; buy them
- b. desk ----- bookcase
- ☐ 0= Furniture, office furniture, both hold books ☐ 1= Wooden, legs ☐ 2= Not pertinent; differences

Differences: "Now, I'm going to ask you how two things are different. For example, if I asked you how sugar and vinegar were different, you might say one is sweet and one is sour. Please tell me how a (insert word) and a (insert word) are different?"

12. Can you tell me what is the difference between these things?
- a. lie ----- mistake
- ☐ 0= One deliberate, one unintentional ☐ 1= One bad, the other good- or explains only one ☐ 2= Anything else
- b. river ----- canal
- ☐ 0= Natural-artificial ☐ 1= Anything else

Calculations

13. How many nickels are in a dollar (20) ☐ 0= Correct ☐ 1= Incorrect
14. How many quarters in \$6.75? (27) ☐ 0= Correct ☐ 1= Incorrect
15. Subtract 3 from 20 and keep subtracting 3 from each number, all the way down? (20, 17, 14, 11, 8, 5, 2) ☐ 0= Correct ☐ 1= Incorrect

CERAD Immediate Recall

Intro/Trial 1: **“On this next task, I will ask you to try to remember a list of 10 words. I will read the list of words to you 3 times, and each time after I have finished, I will ask you to tell me as many of the words as you can remember. It doesn’t matter in what order you say them, just tell me as many as you can. Are you ready? Now, please listen closely as I read each word.”**

1a. **“Now, tell me all of the words you can remember.”**

Trial 2: **“Great. Now, we are going to try that again. I am going to read to you the same list of 10 words but in a different order, and again when I stop, I want you to tell me as many of the words as you can remember, including any words you may have said the first time. Listen closely as I read each word.”**

2a. **“Now, tell me all of the words you can remember.”**

(If ppt appears to be trying only to repeat words not said during Trial 1, prompt with “It doesn’t matter if you’ve already said them before.”)

Trial 3: **“We’re going to try that one last time. I am going to read to you the same list of 10 words one more time in a different order. Again, when I stop, I want you to tell me as many of the words as you can remember. A little later in the call, I will ask you to recall these words again. Listen closely as I read each word.”**

3a. **“Now, tell me all of the words you can remember.”**

*Read each word slowly (2 secs per word) and enunciate clearly. Allow up to 90 seconds for recall on each trial. After 10-15 seconds of silence (or if the ppt indicates they cannot recall anymore words), prompt one time with **“Anything else?”** and then move to next trial.*

Scoring: Record the number of correct words and serial position of each word recalled within a trial.

If a participant reports they are unable to hear ≥ 3 or more words in any trial, discontinue the CERAD due to hearing loss (or phone connection, as appropriate). If the immediate recall trials are discontinued, then delayed recall should not be attempted (and the same discontinuation code should be entered for that subtest). If the participant is unable to hear 1-2 words across two or more trials, this should be noted in the section on factors affecting validity.

| Trial 1 | Trial 2 | Trial 3 |
|----------------|----------------|----------------|
| 1) Butter | 1) Ticket | 1) Queen |
| 2) Arm | 2) Cabin | 2) Grass |
| 3) Shore | 3) Butter | 3) Arm |
| 4) Letter | 4) Shore | 4) Cabin |
| 5) Queen | 5) Engine | 5) Pole |
| 6) Cabin | 6) Arm | 6) Shore |
| 7) Pole | 7) Queen | 7) Butter |
| 8) Ticket | 8) Letter | 8) Engine |
| 9) Grass | 9) Pole | 9) Ticket |
| 10) Engine | 10) Grass | 10) Letter |
| Total 1 | Total 2 | Total 3 |
| (NCST2b13): | (NCST2c13): | (NCST2d13): |

DIGITS BACKWARDS

Materials: Black pen

Instructions and Script: “Now I am going to say some numbers. When I stop, I want you to say them backwards. For example, if I say: 1-2-3, what would you say?” If the participant responds correctly (3-2-1), say, “*That’s right*” and proceed to item 1. If the participant fails the practice trial say, “No, you would say 3-2-1. I said 1-2-3; so to say those numbers backwards, you would say, ‘3-2-1’”.

“Now try these numbers.” Read the digits clearly and at a rate of 1 per second. Say the numbers in a monotone voice with inflection dropping slightly on the last digit. Remember to administer both trials of each item. Begin Trial 2 and beyond saying, “**Here’s another.**” Each trial may be presented only once.

Record responses verbatim. Scoring: completely correct trial = 1 point (e.g., Item 1, Trial a: 1-5 = 1 point). Incorrect trial = 0 points. Total the number correct at the bottom of the form.

Discontinue after two consecutive errors of the same length item (e.g., missing two 5-digit sequences).

| Trial Sequence | | Response | Correct | Error/ Refused |
|---------------------------------------|--|----------|--------------------------|--------------------------|
| 1 | Trial a: 5-1 (1-5) | | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trial b: 3-8 (8-3) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Trial a: 4-9-3 (3-9-4) | | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trial b: 5-2-6 (6-2-5) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Trial a: 3-8-1-4 (4-1-8-3) | | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trial b: 1-7-9-5 (5-9-7-1) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Trial a: 6-2-9-7-2 (2-7-9-2-6) | | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trial b: 4-8-5-2-7 (7-2-5-8-4) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Trial a: 7-1-5-2-8-6 (6-8-2-5-1-7) | | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trial b: 8-3-1-9-6-4 (4-6-9-1-3-8) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | Trial a: 4-7-3-9-1-2-8 (8-2-1-9-3-7-4) | | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trial b: 8-1-2-9-3-6-5 (5-6-3-9-2-1-8) | | <input type="checkbox"/> | <input type="checkbox"/> |
| Total number correct trials (NCST3b): | | | _____ | |

CERAD Delayed Recall

Instructions: “A few minutes ago, I read a list of 10 words to you several times. Now, I want you to tell me as many of those words as you can remember.”

Scoring: *Record the number of correct words and serial position of each word recalled within a trial.*

*Allow up to 90 seconds for recall. After 10-15 seconds of silence (or the ppt indicates they cannot recall anymore words), prompt one time with “**Anything else?**”*

| |
|--------------|
| 1) Butter |
| 2) Arm |
| 3) Shore |
| 4) Letter |
| 5) Queen |
| 6) Cabin |
| 7) Pole |
| 8) Ticket |
| 9) Grass |
| 10) Engine |
| Total |
| (NCST4c): |

ORAL TRAILS A

Materials: Black pen, stopwatch

TEST A

“Ok, now we’ll try something a little different. I’d like you to count from 1 to 25 as quickly as you can. Just like this: 1, 2, 3, 4, and so on. Ready? Go ahead.”

Start timing immediately after saying “Go ahead”. Call all errors to the participant's attention immediately and have the participant continue with the series from the last correct number (e.g., if the ppt said... 13, 14, 16... Say **“I’m sorry; that was incorrect. Please start at 14 and continue.”** Do not stop timing during corrections.

If the participant stops for 5 or more seconds before reaching 25, prompt with **“Please keep going.”** If the participant doesn’t recall where they are in counting, provide the last correct response (e.g., **“Please start at 14 and continue.”**) and score as an error. After a further delay of 15 or more seconds, discontinue and code as not attempted due to task difficulty. Up to 5 attempts are allowed for this task.

At the end, say **“That’s fine.”** or **“Very good.”**

Scoring: Draw a horizontal line through boxes under #s the participant says in correct order. Draw an X in the box below the # where the participant makes an error.

Record total time it took the participant to complete the series, total # correct, and total # of errors below.

Note: If the participant makes 5 errors, then the test should be stopped. Errors should be recorded as 5 and time should be recorded as 4 min 0 sec (regardless of the actual time it took to make the errors). If the participant exceeds 4 minutes, then the test should be stopped and the time is recorded as 4 min 0 sec, and errors recorded should be the actual # of errors made in those 4 minutes.

Attempt 1:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 2:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 3:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 4:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 5:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---------------------------|---|
| 1) Total time to complete | _____ : _____ (Max =4:00) Minutes Seconds (NCST5b) (NCST5c) |
| 2) Total number correct | _____ (Max = 25) (NCST5d) |
| 3) Total number of errors | _____ (Max = 5) (NCST5e) |

ORAL TRAILS B

Materials: Black pen, stopwatch

SAMPLE

"Now, I'd like you to alternate between numbers and letters when you count. So, you would say the number 1, and then say the letter A, then number 2, then letter B, and so on. Let's do a practice trial first. Please count to the number 4, alternating between numbers and letters. Ready? Go ahead."

If the participant makes an error, make an X in the box below the #/letter where the error was made and say, "I'm sorry, that was not quite correct. It should be 1, A, 2, B, 3, C, 4. Let's try it again."

Practice 1:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | A | 2 | B | 3 | C | 4 |
| | | | | | | |

Practice 2:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | A | 2 | B | 3 | C | 4 |
| | | | | | | |

Practice 3:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | A | 2 | B | 3 | C | 4 |
| | | | | | | |

Allow up to 3 practice attempts. Repeat instructions with guidance only twice. *If the participant cannot complete the practice or clearly does not comprehend the task, do not administer Test B (code as not Attempted due to task difficulty).*

TEST B

"Good. Now, I want you to do that same thing, but with more numbers and letters. Just like before, you'll say 1, A, 2, B, 3, C, 4; but this time, keep going until you reach the number 13. Ready? Go ahead."

Start timing. Call all errors to the participant's attention immediately (draw an X in the box below the #/letter where the error occurred) and have the participant proceed from the point the mistake occurred. Say, for example, **"I'm sorry; that was incorrect. Please start at (number-letter pair) and continue."** Do not stop timing.

You can remind the participant by saying **"Number-Letter" to keep them on task.*

If the participant stops for 5 or more seconds before reaching 13, prompt with **"Please keep going."** If the participant doesn't recall where they are, provide the last correct number-letter pair (e.g., **"Please start at 3-C and continue."**) and score as an error. After a further delay of 15 or more seconds, discontinue and code as not attempted due to task difficulty. Up to 5 attempts are allowed for this task.

Scoring: Draw a horizontal line through boxes under #/letters the participant says in correct order. Draw an X in the box to indicate an error.

Record total time it took the participant to complete the series, total # correct, and total # of errors below.

Note: If the participant makes 5 errors, then the test should be stopped. Errors should be recorded as 5 and time should be recorded as 4 min 0 sec (regardless of the actual time it took to make the errors). If the participant exceeds 4 minutes, then the test should be stopped and the time is recorded as 4 min 0 sec, and errors recorded should be the actual # of errors made in those 4 minutes.

Attempt 1:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|---|----|---|----|
| 1 | A | 2 | B | 3 | C | 4 | D | 5 | E | 6 | F | 7 | G | 8 | H | 9 | I | 10 | J | 11 | K | 12 | L | 13 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 2:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|---|----|---|----|
| 1 | A | 2 | B | 3 | C | 4 | D | 5 | E | 6 | F | 7 | G | 8 | H | 9 | I | 10 | J | 11 | K | 12 | L | 13 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 3:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|---|----|---|----|
| 1 | A | 2 | B | 3 | C | 4 | D | 5 | E | 6 | F | 7 | G | 8 | H | 9 | I | 10 | J | 11 | K | 12 | L | 13 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 4:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|---|----|---|----|
| 1 | A | 2 | B | 3 | C | 4 | D | 5 | E | 6 | F | 7 | G | 8 | H | 9 | I | 10 | J | 11 | K | 12 | L | 13 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Attempt 5:

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|---|----|---|----|
| 1 | A | 2 | B | 3 | C | 4 | D | 5 | E | 6 | F | 7 | G | 8 | H | 9 | I | 10 | J | 11 | K | 12 | L | 13 |
| | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|----------------------------------|---|
| 1) Total time to complete | <div> <div>_____</div> <div>Minutes</div> <div>(NCST6b)</div> </div> : <div> <div>_____</div> <div>Seconds</div> <div>(NCST6c)</div> </div> (Max =4:00) |
| 2) Total number correct | <div> <div>_____</div> <div>(NCST6d)</div> </div> (Max = 25) |
| 3) Total number of errors | <div> <div>_____</div> <div>(NCST6e)</div> </div> (Max = 5) |

WORD FLUENCY TASK

Materials: Black pen, stopwatch

Instructions and script: “On this next task, I will say a letter. Then I want you to tell me as many different words as you can think of, as fast as you can, that begin with that letter.

Leave out names of people, names of places, and numbers. So, if I were to say ‘T,’ you should not say words like ‘Thomas,’ ‘Texas,’ or the number ‘Ten.’ But, you could say words like ‘table,’ ‘take,’ or ‘turtle.’

Also, do not use the same word again with a different ending. For example, if you said ‘take,’ then you should not say ‘takes,’ or ‘taking.’ These would all be considered the same word. Now, I want you to tell me as many words as you can think of that start with the letter F. Can you say that letter back to me, so I know you heard me okay? *(If ppt repeats “F” proceed with task. If they say any other letter, repeat the instruction again. After the 2nd failed attempt, say “F as in fire” and confirm the ppt heard “F”. If they still cannot understand, discontinue the task due to the appropriate reason, such as hearing loss or bad phone reception.)* **Ok good. I will tell you when to stop. Are you ready? Go.”**

Start the stopwatch. Record all words produced (use the back of the page if more space is needed). However, if the examiner can’t keep up with the words produced and misses a word but is certain that the participant produced an admissible word, place an “X” on the line to indicate credit for the word. (If you have trouble clearly hearing a word that the ppt says, but are fairly certain it was an admissible word, credit can be given.) Place a single strike mark through inadmissible words, e.g., proper nouns (names or places), simple variations (adding “ed” or “ly”), plurals, and repetitions.

If the participant stops for more than 10 seconds, encourage further responses. Say, “Can you think of any more words that start with the letter F?” Allow 60 seconds for each letter. The next letter is not given until the entire 60 second period has passed.

After 60 seconds, instruct the participant to stop and proceed to the letter A saying, “**Stop. Thank you. Now, tell me as many words as you can think of that start with the letter A. Can you say that letter back to me, so I know you heard me okay?** *(If ppt repeats “A” proceed with task. If they say any other letter, repeat the instruction again. After the 2nd failed attempt, say “A as in apple” and confirm the ppt heard “A”. If they still cannot understand, discontinue the task due to the appropriate reason, such as hearing loss or bad phone reception.)* **Ok good. I will tell you when to stop. Are you ready? Go.”** Begin timing. Allow 60 seconds.

Do not intervene for the occasional inadmissible word, however, if the participant has clearly lost focus as to what to do (e.g., begins naming only inadmissible words, such as numbers, or begins to name only variants of a previous word, such as “flower” followed by “rose,” “daisy,” etc.), clarify the instructions by saying, “**Tell me words that start with F (or A) but do not include numbers,**” (or people, etc. depending on the error).

If a participant asks if they have already said a word, do not say “yes” or “no.” Instead, simply encourage more responses saying, “It’s okay; keep going.”

| | F | A |
|-------|-----------------|-----------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| TOTAL | (NCST7b): _____ | (NCST7c): _____ |

ANIMAL NAMING FORM

Score: (NCST8b) _____

Materials: Black pen, stopwatch

“Now we’ll try something different. On this next task, I want you to tell me as many different animals as you can think of. Name them as quickly as you can. I will tell you when to stop. Ready? Go.”

Start timing. Allow 60 seconds. Write down all of the words produced verbatim in the order in which they were presented. *If there is a pause of 10 seconds or more, repeat basic instructions and give the starting word “dog.” If the participant discontinues before the end of the time period, encourage him/her to produce more names.*

Score the total number of admissible animals.

| Animals | | | |
|---------|--|----|--|
| 1 | | 17 | |
| 2 | | 18 | |
| 3 | | 19 | |
| 4 | | 20 | |
| 5 | | 21 | |
| 6 | | 22 | |
| 7 | | 23 | |
| 8 | | 24 | |
| 9 | | 25 | |
| 10 | | 26 | |
| 11 | | 27 | |
| 12 | | 28 | |
| 13 | | 29 | |
| 14 | | 30 | |
| 15 | | 31 | |
| 16 | | 32 | |

After Animal Naming, say: **“We are almost finished, and have about 10-15 minutes of questions left. Would you like to take a break now, or keep going?”** *(If ppt wishes to take a break, allow them to take a 5-10 min break and finish the battery. If the ppt indicates they would like to stop now, and finish another time, please schedule a preferred date/time with the ppt to finish the CEST and CDPT forms.)*



CES DEPRESSION for TELEPHONE FORM



ID
NUMBER:

FORM CODE: CEST

DATE: 04/26/2020
Version 1.0

ADMINISTRATIVE INFORMATION

0a. Completion Date: //
Month Day Year

0b. Staff ID:

Script: "These next questions are about how you might have felt or behaved recently. For each question, please tell me how often you felt this way during the past week."

| | Never or <1 day | 1-2 days in the past week | 3-7 days in the past week |
|--|----------------------------|---------------------------------|---------------------------------|
| 1) During the past week, would you say that you felt depressed: never or <1 day, 1 to 2 days, or 3 to 7 days? | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| 2) During the past week, would you say that you felt lonely: never or <1 day, 1 to 2 days, or 3 to 7 days? | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| 3) During the past week, would you say that you had crying spells: never or <1 day, 1 to 2 days, or 3 to 7 days? | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| 4) During the past week, would you say that you felt sad: never or <1 day, 1 to 2 days, or 3 to 7 days? | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| 5) During the past week, would you say that you felt anxious, nervous, or fearful: never or <1 day, 1 to 2 days, or 3 to 7 days? | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |



CLINICAL DEMENTIA RATING SUBJECT INTERVIEW for TELEPHONE FORM



ID
NUMBER:

FORM CODE:

| | | | |
|---|---|---|---|
| C | D | P | T |
|---|---|---|---|

DATE: 05/22/2020
Version 1.0

ADMINISTRATIVE INFORMATION

0a. Completion Date:

| | | | | | | | | | |
|----------------------|----------------------|---|----------------------|----------------------|---|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | / | <input type="text"/> | <input type="text"/> | / | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Month | | | Day | | | Year | | | |

0b. Staff ID:

| | | |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|

Instructions: This form is administered to the participant.

Script: “Next, I would like to ask you about your memory and day to day functioning over the past year.”

When needed, emphasize to the participant that we are interested in functioning compared to the past—for example, 10 years ago. Prompt for change and cause of change as needed to determine appropriate scoring.

Note Any reported changes do not have to have **started** in the past year, but should be **present** in the past year. (to indicate consistent, ongoing change)

MEMORY

- Do you forget appointments and (or) rely more on a calendar?
☐ 1 = Yes
☐ 0 = No
- Do you repeat the same questions or stories?
☐ 1 = Yes
☐ 0 = No
- Do you forget what people say in conversations or on the phone, or forget to pass on messages?
☐ 1 = Yes
☐ 0 = No
- Do you spend more time than you used to looking for objects (such as papers, glasses, keys, wallet, etc.)?
☐ 1 = Yes
☐ 0 = No
- Do you have more trouble finding the words that you want to use?
☐ 1 = Yes
☐ 0 = No
- Do you have more trouble coming up with names of people that you see often?
☐ 1 = Yes
☐ 0 = No
- Do you have problems leaving the stove on, or leaving car lights on, or doors unlocked?
☐ 1 = Yes
☐ 0 = No

8. Do you think these changes in your memory have gotten worse in the past year?

- ☐ 1 = Yes
☐ 0 = No
☐ N/A = No memory problems

[The following question is not used in determining the Memory domain score.]

8a. Has anyone in your family ever expressed concern or worry about your memory?

- ☐ 1 = Yes
☐ 0 = No

ORIENTATION

9. Have you had any accidents or close calls while driving in the past year?

- ☐ 1 = Yes
☐ 0 = No
☐ N/A = Does not drive **Go to Item 11**

10. Does someone always ride with you as a navigator when you drive?

- ☐ 1 = Yes
☐ 0 = No

11. Have you gotten lost in a familiar area?

- ☐ 1 = Yes
☐ 0 = No

12. Have you had more difficulty finding your way around outside your own neighborhood?

- ☐ 1 = Yes
☐ 0 = No

JUDGMENT AND PROBLEM-SOLVING

13. Have you noticed any changes in your ability to deal with money, for example, figuring out a tip or getting back correct change?

- ☐ 0 = No loss
☐ 1 = Some loss
☐ 2 = Severe loss

14. Have you noticed any changes in your ability to balance your checkbook or pay bills? For example, have you bounced any checks, forgotten to pay a bill or paid it twice?

- ☐ 0 = No change
☐ 1 = Some change
☐ 2 = Severe change

Questions 15-19 moved to MCHT

COMMUNITY AFFAIRS

20. Are you still working?

- ☐ 1= Yes **Go to Item 21**
☐ 0= No
☐ N/A= Never worked **Go to Item 21**

a. Did memory problems interfere with your ability to do your job?

- ☐ 1= Yes
☐ 0= No

21. Do you belong to any groups (examples: senior citizen, religious, political, professional, volunteer, or social)?

- ☐ 1= Yes
☐ 0= No

22. Have you attended group functions or meetings in the past few months?

- ☐ 0= As often as you used to
☐ 1= Less often than you used to
☐ 2= Not at all

23. Does someone help you with shopping (food or clothes) who previously hadn't (for transportation, driving, etc)?

- ☐ 1= Yes
☐ 0= No
☐ N/A= Does not shop

HOME & HOBBIES

24. Have you noticed changes in your ability to do household chores (choose 1-2 examples: cooking, laundry, cleaning, using household appliances like dishwasher, vacuum, or television, doing grocery shopping, yard work, taking out the garbage, taking care of the car, or fixing things around the house)?

- ☐ 0= No change
☐ 1= Some change
☐ N/A= Never do household chores

25. Has there been any change in your involvement in any hobbies or pastimes (examples: sewing, knitting, painting, playing cards, reading, watching or playing sports)?

- ☐ 0= No change
☐ 1= Some change
☐ N/A = Do not have hobbies or pastimes

CONSENT TO INTERVIEW PROXY

26. Question removed

[Say to the participant:]

"We have a brief set of questions on memory and daily functioning, similar to the ones we just asked you. These questions are designed to be answered by someone who knows you well. Would it be okay with you if we asked your informant/proxy, to answer these questions?"

27. Permission to interview informant/proxy?

☐ 1= Yes *"Thank you. Someone from our staff may be in touch with [him/her] in the future."*

☐ 0= No *"Okay, I understand."* [SAVE AND CLOSE FORM]



NEUROCOGNITIVE BATTERY SUMMARY for TELEPHONE FORM



ID
NUMBER:

FORM CODE:

| | | | |
|---|---|---|---|
| N | C | S | T |
|---|---|---|---|

DATE: 6/10/2020
Version 1.0

ADMINISTRATIVE INFORMATION

0a. Completion Date:

| | |
|--|--|
| | |
|--|--|

 /

| | |
|--|--|
| | |
|--|--|

 /

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Month Day Year

0b. Staff ID:

| | | |
|--|--|--|
| | | |
|--|--|--|

0c. Interviewer device: ☐

A=Cell phone

B=Landline

C=VOIP/PC

0d. Participant device: ☐

A=Cell phone

B=Landline

D=Caption

If a test was discontinued, record the reason for discontinuation using the appropriate letter:

A = Refusal (participant declines/refuses to perform a test)

B = Task difficulty (participant could not fully understand the instructions or became frustrated)

C = Physical impairment (Hearing loss or aphasia)

D = Telephone connection (poor quality, dropped calls, echo, etc.)

E = Distractions (background noise like TV, radio, other voices, etc.)

F = Interruptions (people, pets, kids, etc.)

G = Inappropriate aid (clocks, calendars, writing down answers, help from others)

H = Participant became fatigued

I = Other (note in notelog)

**CHECK IF
DISCONTINUED**

**REASON FOR
DISCONTINUATION**

1. MME/CDP Hybrid (MCHT) ☐ 1a. ☐

**CHECK IF REASON FOR
DISCONTINUED DISCONTINUATION**

2. CERAD Immediate Recall..... ☐2a. ☐

| | b. Trial 1 | | c. Trial 2 | | d. Trial 3 |
|--|------------|--|------------|--|------------|
| 1. Trial 1 discontinued? | | 1. Trial 2 discontinued? | | 1. Trial 3 discontinued? | |
| 2. Reason for trial 1 discontinuation? | | 2. Reason for trial 2 discontinuation? | | 2. Reason for trial 3 discontinuation? | |
| 3. Order Butter named | | 3. Order Ticket named | | 3. Order Queen named | |
| 4. Order Arm named | | 4. Order Cabin named | | 4. Order Grass named | |
| 5. Order Shore named | | 5. Order Butter named | | 5. Order Arm named | |
| 6. Order Letter named | | 6. Order Shore named | | 6. Order Cabin named | |
| 7. Order Queen named | | 7. Order Engine named | | 7. Order Pole named | |
| 8. Order Cabin named | | 8. Order Arm named | | 8. Order Shore named | |
| 9. Order Pole named | | 9. Order Queen named | | 9. Order Butter named | |
| 10. Order Ticket named | | 10. Order Letter named | | 10. Order Engine named | |
| 11. Order Grass named | | 11. Order Pole named | | 11. Order Ticket named | |
| 12. Order Engine named | | 12. Order Grass named | | 12. Order Letter named | |
| 13. CERAD Trial 1 Score | | 13. CERAD Trial 2 Score | | 13. CERAD Trial 3 Score | |

3. Digit Span Backwards..... ☐3a. ☐ 3b. ☐☐

4. CERAD Delayed Recall4a.

4b1. Order Butter named

4b2. Order Arm named

4b3. Order Shore named

4b4. Order Letter named.....

4b5. Order Queen named

4b6. Order Cabin named

4b7. Order Pole named.....

4b8. Order Ticket named

4b9. Order Grass named

4b10. Order Engine named.....

4c. CERAD Delayed total score

5. Oral Trail Making Test (Part A, TMT A)5a.

5b. Time to complete (minutes) 5c. (seconds) (Max = 4:00)

5d. Total number correct... (Max = 25)

5e. Number of errors (Max = 5)

6. Oral Trail Making Test (Part B, TMT B)6a.

6b. Time to complete (minutes) 6c. (seconds) (Max = 4:00)

6d. Total number correct... (Max = 25)

6e. Number of errors: (Max = 5)

7. Word Fluency (FA)7a.

7b. F total

7c. A total

8. Animal Naming..... 8a. 8b.

For all of the tests that were completed (i.e., not discontinued due to factors already noted above), please provide your impression as to whether the tests provide a reasonably accurate indication of the participant's cognitive ability.

Factors Affecting Validity

A = Hearing loss

B= Telephone connection (poor quality, dropped calls, echo, etc.)

C = Distractions (background noise like TV, radio, other voices, etc.)

D = Interruptions (people, pets, kids, etc.)

E = Suspected inappropriate aid (clocks, calendars, writing down answers, help from others)

F = Participant became fatigued

G = Lack of effort or disinterest

H = Emotional issues

I = Other (note in notelog)

9. Do you feel that the tests that were completed provide a reasonably accurate indication of the participant's cognitive ability?

☐ Y Yes ->END FORM

☐ N No: There were factors that may have substantially affected the participant's test results (such as significant hearing loss, phone issues, frequent interruptions, etc.).

If no, please indicate which tests you feel may have questionable results and why (select the appropriate reason from the Factors Affecting Validity key).

9a Does the result for MME/CDP Hybrid (MCHT) reflect the participant's cognitive function?

☐ Y Yes

☐ N No

If 9a is **No**,

9a1. Type of interference ☐

9a2. Comments _____

9b. Does the result for CERAD Immediate Recall reflect the participant's cognitive function?

☐ Y Yes

☐ N No

If 9b is **No**,

9b1. Type of interference ☐

9b2. Comments _____

9c. Does the result for Digit Span Backwards reflect the participant's cognitive function?

☐ Y Yes

☐ N No

If 9c is **No**,

9c1. Type of interference ☐

9c2. Comments _____

9d. Does the result for CERAD Delayed Recall reflect the participant's cognitive function?

☐_Y Yes

☐_N No

If 9d is **No**,

9d1. Type of interference ☐

9d2. Comments _____

9e. Does the result for Oral Trail Making A reflect the participant's cognitive function?

☐_Y Yes

☐_N No

If 9e is **No**,

9e1. Type of interference ☐

9e2. Comments _____

9f. Does the result for Oral Trail Making B reflect the participant's cognitive function?

☐_Y Yes

☐_N No

If 9f is **No**,

9f1. Type of interference ☐

9f2. Comments _____

9g. Does the result for Word Fluency reflect the participant's cognitive function?

☐_Y Yes

☐_N No

If 9g is **No**,

9g1. Type of interference ☐

9g2. Comments _____

9h. Does the result for Animal Naming reflect the participant's cognitive function?

☐_Y Yes

☐_N No

If 9h is **No**,

9h1. Type of interference ☐

9h2. Comments _____