Indianapolis Study of Health and Aging Neuropsychology Checklist

Date:/
Patient Name:
Sex: M F
D.O.B.:/
Education:
Occupation:
Eligibility Family Contacted Family Approved Subject Participation
Patient Mental Status Review Responds to Voice Can Follow Commands Raise Right Hand Tell Name
Informed Consent Informed Consent Read to Patient Informed Consent Signed Pink Copy to Patient Yellow Copy to Patient Chart (Misc) White Copy to Study
Testing Neuropsychology Face Sheet Completed Standard Protocol Booklet Administered Geriatric Depression Scale Cognitive Status Summmary Sheet Study Generated Tracking Sheet

INDIANAPOLIS - IBADAN PROJECT

Neuropsychological Battery

Indianapolis Version

Revised: November 6, 1992

Indianapolis Study of Health and Aging

Name:	Occu:
Age:	Date:
Educ:	Tech:

Cognitive Status Profile

		MMSE		AF		BNT		CP		WL-S		WL-D		D					
•	Educ	all	low	hg	all	low	hg	all	low	hg	all	low	hg	all	low	hg	all	low	hg
nits	75th	 29	28	30	17	 14	 20 -	14	 13	15	11	11	11	18	- 15	22	- 6	 5	7
Within wormal Limits	50th	 27	27	29	 14 	12	 16	13	12	14	 9		10	14	13		4	3	6
/ithin 140	25th	26	· 25	. 27	 11	10	13	10	9	13	8	. 7	. 9	12	11	- - 14	3	2	3
×	10th	24	23	26	10	9	- 11	9	7		7	: : : : 7	 	 9	· · · 9	- 12	1	1	2
	→		•				•	(: : :		·		•		
Impaired	5th	23	22	. 25	9	8 -	10	7	6	10	7	6	7	8	7	10	0	0	1
[m]	2nd	22	22	24	7	4	9	6	6	9	6	6	7	7	6	10	0	0	1
}					- '		•	:	-			•		-	I	·			
Pr	esent										-								
P	ast	<u></u>																	
Cł	nange			-3			-5			-3			-2			-6			-2

Note: low.educ=<12 years (n=48, age=75, educ=7); high educ=12+ (n=35, age=74, educ=14); all=both samples (n=83, age=75, educ=10).

NEUROPSYCHOLOGICAL DEMOGRAPHIC SHEET

MM DD YY
Patient Name: (First) (M) (Last)
Subject Number: Sex: Male Female
Date of Birth:// Age: MM DD YY
Ethnicity: Caucasian African-Amer Hispanic Asian other ()
Native Language: English Spanish German French other
Education (# yrs completed): State Educated In:
Description of Education: O GED
<pre># years in Primary Occupation:</pre> Handedness: (circle one) Right Left Mixed
Examiner Name:
Location of Exam: IUMC outpt1 IUMC inpt2 Evaluation Start Time:: Nursing Hm3 Hospital4 Evaluation Finish Time:: S's Home5 Other6

MINI-MENTAL STATUS EXAM

"Now I would like to ask you some questions to check your memory and concentration. Some of them will be easy and some of them will be hard." Read items exactly as they are written. Record patient's response and correct answer for each item. (Record score for each item: 0 = incorrect; 1 = correct; NA; D/C; R) (___/1) 1. What is the year? Pt: _____ Actual: ____ (_/1) 2. What is the season of the year? (March = W/Sp; June = Sp/Su; Sept. = Su/F; Dec. = F/W) Pt: _____ Actual: ____ (___/1) 3. What is the month? Actual: 4. What is the date? (Day of month.) (/1) Pt: _____ Actual: ____ (___/1) 5. What is the day of the week? _____ Actual: _____ 6. What state are we in? (/1) Pt: ____ ___ Actual: ____ (___/1) 7. What county are we in? ___ Actual: ____ (/1) 8. What city are we in? Pt: _____ Actual: _____ (_ /1) 9. What floor are we on? Pt: Actual: (___/1) 10. What is the name of this building (address if home)? Pt: _____ Actual: ____ (___/3) 11. I am going to name 3 objects. After I say them, I want you to repeat them. I want you to remember them because I will ask you to name them again for me in a few minutes. Please repeat these names for me. Apple _____ Table ____ Penny # Trials (1-3) ____ (4 = unable) (___/5) 12. Now I want you to say the days of the week, from Monday to Friday. (Repeat if needed, assist as needed). Now I want you to say the days of the week backwards (in reverse order), start with Friday and go backwards. (No further assistance). (Score is number correct Th W Tu M

before first error)

MMSE-Indpls.

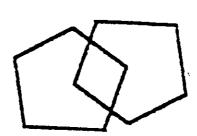
	·
(/3)	Apple Table Penny
(/1)	14. What is this called? (Point to your wristwatch.) Pt:
(/1)	15. What is this called? (Show your pencil.) Pt:
(/1)	16. I would like you to repeat a phrase after me: NO IF'S, AND'S, OR BUT'S. (Do not repeat. Allow only one trial. Must be perfect to receive credit.) Pt:
(/1)	17. Read the words on this page, then do what it says. (Code as correct only if subject closes eyes. Verbal response not important. If subject fails enter zero for #17 and go to Part B.) Score Part B: Read the phrase out loud. Part C: Do what he is doing. 0 1
(/3)	18. I am going to give you a piece of paper. When I do, take the paper in your right hand, fold the paper in half with both hands, and put the paper down on your lap. (Read full statement, then hand the paper midline. Do not repeat or coach. Right Hand Folds in Half In Lap
(/1)	19. Write any complete sentence on this piece of paper (Spelling and grammar are not important. Must have a subject, real or implied, and a verb: "Go away" is acceptable.)
(/1)	20. Here is a drawing. Please make a copy of it in this area. (Score correct if the two 5-sided figures intersect to form a 4-sided figure and i all angles in the 5-sided figures are preserved.

TOTAL MMSE SCORE: _____/30

CLOSE YOUR EYES

	Name:	- 	Date: / /
	~ - u	e service de la companya de la comp	

Name:	 Date:	_/ /



ANIMAL FLUENCY

"I am going to give you a category and I want you to name, as fast as you can, all of the things that belong in that category. For example, if I say 'Articles of Clothing', you could say shirt, tie, or hat. Can you think of other articles of clothing?"

After you are satisfied that the subject understands the task and has given 2 words naming articles of clothing, say ...

"That's fine. I want you to name all of the things that belong to another category. That is 'Animals'. Any type of animal is OK: farm animals, birds, fish, any kind of animal will do. You will have one minute. Ready, go."

Record answers in appropriate 15 second intervals. If the subject says he/she is done before time is up, encourage the subject to continue responding by saying ...

"Keep trying to tell me as many animals as you can."

Time Intervals

<u>0-15</u> sec	<u>16-30</u> sec	31-45 sec	46-60 sec
		1.	
		2	
3	3	3	3
	4		-
	5		
6	6	6	
		7	
			8
			9
			10
		11	
		12	
13	13	13.	13
			14
			15.
0-15 sec =	16-30 sec =	31-45 sec =	46-60 sec =

Grand Total = ____

Scoring Notes:

- 1. Do not give additional credit for repeated words or obvious redundancies (e.g., black dog, brown dog).
- 2. A species and any accompanying breeds within a species each get credit (e.g., dog, terrier, poodle).
- 3. Separate names for male and female of a species each get credit (e.g., bull and cow).
- 4. Anything not vegetable or mineral is animal.

BOSTON NAMING TEST - 15

"Now I am going to show you some pictures and I want you to say the name of each picture."

Record all incorrect responses verbatim. Maximum exposure per picture is 10 seconds. If the subject responds with an over-inclusive response (e.g., "boat" for canoe), use the neutral prompt: "Is there another name for that?" Overly specific answers or subcategory answers (e.g., "daisy" for flower) are generally scored as correct. No other help should be given. If the patient gives more than one response ask them which they prefer. If the patient cannot think of the name of the object, the item is scored as incorrect. Record score as follows: 0 = incorrect; 1 = correct.

<u>Score</u>		HIGH
	1.	Tree
	2.	Bed
	3.	Whistle
	\lnot.	Tiower
	5.	House
		MEDIUM
	6.	Canoe
	7.	100tilot ush
	8.	VOICANO
	٦.	Irlask
	10.	Camel
		LOW
	11.	Harmonica
	12.	1011g5
	IJ.	Hammock
	14.	rumer
	15.	Dominoes
		Number Correct
·		High Frequency
	·	Medium Frequency
		Low Frequency
		Total Correct

Scoring Notes:

1. Colloquial terms are acceptable:

house - school, hospital

mask - false face, doe face

harmonica - mouth organ, French harp, blues harp,

hammock - swing

2. No points are scored for correct answers following semantic or phonemic cuing for the CERAD.

Trial 1

WORD LIST MEMORY TASK

"I am going read a list of 10 words. Listen closely. When I am finished, I will ask you to tell me all ten words". (Read the words at the rate of one every 2 seconds. Record the serial position of each word recalled.)

	Trial 1			Trial 2		•	Trial 3	
1. 2. 3. 4. 5. 6. 7.	Butter Arm Shore Letter Queen Cabin Pole Ticket		1. 2. 3. 4. 5. 6. 7.	Ticket Cabin Butter Shore Engine Arm Queen Letter		1. 2. 3. 4. 5. 6.	Queen Grass Arm Cabin Pole Shore Butter	
9.	Grass		9.	Pole		8. 9.	Engine Ticket	
10.	Engine		10.	Grass		10.	Letter	
Tota Corr		<u>T1</u>		·	<u>T2</u>			<u>T3</u>
Tota Intr	l usions:	·	•		•			

After Trials 1 and 2 say: "We are going to try that again. Listen closely as I read each word. Later I will ask you to recall all 10 words".

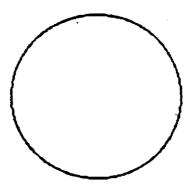
CONSTRUCTIONAL PRAXIS

"Now I would like you to draw this picture as best you can down here in this space (point). Make sure you include everything you see in your copy." Allow approximately 60 sec. per drawing.

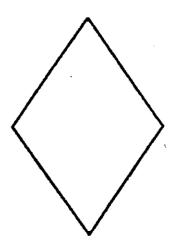
ITEM	<pre>#1 CIRCLE (Examiner say: "circle")</pre>)		
a)	010000 011010	Incorrect.0 Correct1		
b)	Circular shape (longest diam/shortest diam ≤ 1.5)	Incorrect.0 Correct1		/2
ITEM	#2 DIAMOND (Examiner say: "diamond	i")		
a)	Draws 4 sides (3 sides = 0, 5 sides = 0)	Incorrect.0 Correct1		
p)	Closes all 4 angles of figure (gap less than 5mm)	Incorrect.0 Correct1		
C)	Sides of approx. equal length (longest side/shortest side ≤ 1.5)	Incorrect.0 Correct1	Total #2	/3
ITEM	#3 RECTANGLES (no verbal cue)			
a)	Figures are four-sided	Incorrect.0 Correct1		
b)	Overlap resembles original	Incorrect.0 Correct1		/2
ITEM	#4 CUBE (no verbal cue)			
a)	_ _ _	Incorrect.0 Correct1		
b)	Frontal face correctly oriented	Incorrect.0 Correct1		
C)	Internal lines correctly drawn (all lines must be present)	Incorrect.0 Correct1		
d)	Opposite sides are parallel (within 10 degrees, all lines must be present)	Incorrect.0 Correct1	Total #4	/4
	-	Grav	nd Total	/1

Name:	_			
	Date:	1	/	

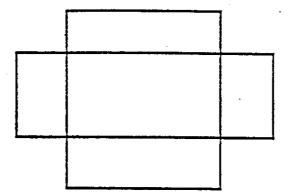
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NT	_		
Name:	 Date:	1.	/

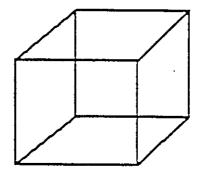


-			
Name: _	 Date:	1	1



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*Name:	Date:	1	,	
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DELAYED RECALL OF WORD LIST

"A few minutes ago, I read you a list of 10 words several times. Now I want you to recall as many of those words as you can." (Record serial position of each word recalled. Allow 90 seconds. Record intrusions in space provided.)

1.	Butter	
2.	Arm	
3.	Shore	
4.	Letter	
5.	Queen	
6.	Cabin	Total Correct:
7.	Pole	
8.	Ticket	Total Intrusions:
9.	Grass	· · · · · · · · · · · · · · · · · · ·
10.	Engine	
	·	

WORD LIST RECOGNITION

"Now I am going to help you out a little. I am going to read another list of words. Some of the words are from the list I read to you earlier and some of the words are new. Say yes if the word is one I read to you before, no if it is not. (Circle subject's response, yes or no.)

	Word	Response		Word	Response
1. 2.	church coffee	yes/NO yes/NO	11.	QUEEN	YES/no
з.	BUTTER	YES/no	12. 13.	CABIN slipper	YES/no yes/NO
4. 5.	dollar ARM	yes/NO YES/no	14. 15.	POLE village	YES/no
6.	SHORE	YES/no	16.	string	yes/ NO yes/ NO
7. 8.	five LETTER	yes/NO YES/no	17. 18.	TICKET troops	YES/no yes/NO
9. 10.	hotel mountain	yes/NO yes/NO	19. 20.	GRASS ENGINE	YES/no YES/no
		- ,	~ ~ .	THOTHE	125/110

(Correct answers: BOLD-CAPITALS)

Total Correct YES: ____/10
Total Correct NO: ___/10

DELAYED RECALL OF BNT OBJECTS

NAM	E:	· · · · · · · · · · · · · · · · · · ·		DATE:	
let. (15 ob theref	Hold up stimulus t jects as you can." ore, <u>any reasonable</u>	pooklet but don't Record serial pos name or descripti	show items.) ition of each vion of the obje	5 line drawings of obje Now I want you to reword recalled. This is not that clearly indicates a sions in space provided.	call as many of those of a naming test;
1. 2. 3. 4. 5. 6. 7.	Tree Bed Whistle Flower House/bldg Canoe/boat Toothbrush Volcano/Mtn		9. 10. 11. 12. 13. 14.	Mask Camel Harmonica Tongs/picker-up Hammock/swing Funnel Dominoes/dice	
	1 Correct: 1 Intrusions:	<u>-</u>			
•		DAM OF	WOW DEGG	- CARTION	

BNT OBJECT RECOGNITION

"Now I am going to show you two line drawings at a time. One of them is exactly the same as one you tried to name earlier from this book (hold up stimulus book) and the other one is not. Point to the object that is the same as the one you saw earlier." Circle subject's response, A or B.

1. Tree a/B 9. Mask A/b 2. Bed A/b 10. Camel a/B 3. Whistle A/b 11. Harmonica a/B 4. Flower a/B 12. Tongs A/b	<u>W</u>	ord	Response		Word	Response
6. Canoe a/B 13. Hammock a/B 14. Funnel A/b 7. Toothbrush A/b 15. Dominoes a/B 8. Volcano A/b	2. 3. 4. 5. 6.	Bed Whistle Flower House Canoe Toothbrus	A/b A/b a/B A/b a/B a/B	10. 11. 12. 13.	Camel Harmonic Tongs Hammock Funnel	a/B a a/B A/b a/B A/b

(Correct answers: BOLD-CAPITALS)

Total Correct A: ____/8
Total Correct B: ____/7

MODIFIED TOKEN TEST

NAME:	DATE:			
Instructions: Place the Token sheet on the table so that the small sclosest to the subject. Say, "As you see, there are several figures colors; large and small (examiner points) — circles and squares (yellow, and green (examiner points). I will ask you to do differe listen carefully and try to carry out the actions exactly as I say have finished stating each instruction."	of differer examiner po nt things o	it siz	es, s) r is tes	hapes, and ed, black,
Begin with item #1. If the subject fails to respond after 5 seconds of "Let's try that again" and repeat the instructions. If the patient again incorrectly, proceed to the next item. Give no additional aid. If the complains that he or she has forgotten part of the command, instruction be remembered. Follow this procedure with all test items. If the spoint with, say "Your finger."	gain fails to e subject as et the subjec	resp ks fo	ond or a r	or responds repetition or
Score 2 points for correct responses on the first trial. 1 point for su (0) points for failure on a second trial. Minimum score = 0 , maximum	num score	seco = 2	nd tr 4.	ial, and zero
	Sco	<u>re (</u>	circle	e <u>one)</u>
1. Point to a square.		2	1	0
2. Point to a yellow circle.		2	1	0
3. Point to the large black square.		2	1	0
4. Point to the large red circle.		2	1	0
5. Point to the small green circle and the small black circle).	2	1	0
6. Point to the small yellow circle and the large red square	!.	2	1	0
Turn the Token sheet over so that the squares in the eight figure arra	ay are close	st to	the :	subject.
7. Point to the black circle and the green square.		2	1	0
8. Point to the yellow square or the red circle.		2	1	0
9. Touch all the squares except the green one.		2	1	0
10. Point to the green circle, the black square, and the yell	ow circle.	2	1	0
11. Touch the black circle after touching the red square.		2	1	0
12. Before pointing to the yellow square, point to the green	circle.	2	1	0

Total ____

ANCILLARY	ITEMS OF TOWAL
_	

<u>Score</u>	
/5	62. Now I am going to give you a word and ask you to spell it forwards and backwards. The word is WORLD. First spell it forwards. Now spell it backwards. (Repeat if needed; help subject spell forward if needed.)
	D L R O W omit, t-pose, and insert.)
Score	"Please draw this figure." Cube drawing.
	63. Figure is 3-dimensional (can exist, has volume) 64. Frontal fase correctly oriented
	65. Internal lines correctly drawn (all lines must be present)
	66. Opposite sides are parallel (within 10 degrees, all lines must be present) 67. Total
	10001

GDS

Name: Date	
Choose the best answer for how you felt over the past week.	
1. Are you basically satisfied with your life?	
2. Have you dropped many of your activities and interests?	
3. Do you feel that your life is empty?	yes / no
4. Do you often get bored?	
5. Are you hopeful about the future?	yes / no
6. Are you bothered by thoughts you can't get out of your head?	
7. Are you in good spirits most of the time?	yes / no
8. Are you afraid that something bad is going to happen to you?	
9. Do you feel happy most of the time?	yes / no
10. Do you often feel helpless?	yes / no
11. Do you often get restless and fidgety?	yes / no
12. Do you prefer to stay home, rather than going out and doing	
new things?	
13. Do you frequently worry about the future?	
14. Do you feel you have more problems with memory than most?	
15. Do you think it is wonderful to be alive now?	
16. Do you often feel downhearted and blue?	
17. Do you feel pretty worthless the way you are now?	
18. Do you worry a lot about the past?	
19. Do you find life very exciting?	
20. Is it hard for you to get started on new projects?	
21. Do you feel full of energy?	
22. Do you feel that your situation is hopeless?	
23. Do you think that most people are better off than you are?	
24. Do you frequently get upset over little things?	yes / no
25. Do you frequently feel like crying?	yes / no
26. Do you have trouble concentrating?	yes / no
27. Do you enjoy getting up in the morning?	yes / no
28. Do you prefer to avoid social gatherings?	yes / no
29. Is it easy for you to make decisions?	yes / no
30. Is your mind as clear as it used to be?	yes / no

REVISED BEHAVIORS AND ATTITUDE CHECKLIST

INSTRUCTIONS TO EXAMINERS: These are behavioral ratings on the subject during the session. Please rate the subject's overall behavior on each dimension. Scales are dichotomously anchored. The midpoint represents normal behavior. The continuum end points represent behavioral extremes.

Level of Arousal 1. Sleepy Hypervigilant 1 2 3 4 5 6 7 Neutral 2. Needs external stimulation Actively to stay awake hallucinating 3 4 5 6 7 Neutral Attention and Concentration 3. Attentive Distractible 2 3 4 5 6 7 Neutral Visuomotor function 4. Fast to Slow to initiinitiate ate movement 1 2 3 4 5 6 7 Neutral 5. Skilled Awkward movements movements 1 2 3 4 5 6 7 Neutral Language 6. Excessive Sparse 3 4 5 6 7 Neutral 7. Direct Vague 2 3 4 5 6 7 Neutral 8. Converses Converses only spontaneously when spoken to 2 3 4 5 6 7 Neutral 9. Speech garbled Crisp or mumbled Enunciation

3 4 5 Neutral

Behavior Checklist

Reaction to test items
10. Understands
directions

Confused with directions

11. Tracks task throughout

Forgets task Requires help

12. Easy

Effortful

Work Habits

Slow

14. Precise

Careless

15. Persistent

Abandons

Affective expression

Dysphoric

Attitude toward examiner

. 17. Hostile

Friendly

Attitude toward testing situation

Tense/Agitated

19. Tries hard

Tries little

Attitude toward self

Insecure

Behavior Checklist

Please check if you learn of or observe any of the following:

Neglect	Hemiparesis - Left side	Right Side
Aphasia	Uncooperativeness	Arthritis
Anxiety	Catastrophic rxn	Paranoia
Visual Problems	Visual Neglect	Halluctn.
Auditory Problems	Blunted Affect	Tremor
	•	

Overall judgment of test results:

Valid

1 2 3 4 5 6 7

Neutral

Additional observations worth noting: