

CODING MANUAL FOR COGNITIVE FUNCTION TEST("MMSE or MM EXAM")

SAS DATASET NAME = LMM1\_7.SSD01

CONTAINS:

MMSE VARIABLES FOR OFFSPRING COHORT EXAMS 5-7  
(MMSE WAS NOT ADMINISTERED BEFORE EXAM 5)

4084 RECORDS

NOTE: this dataset is the most updated version of all previous MMSE questionnaires which were included in the exam datasets. In case of differences in the values between current dataset (lmm1\_7) and previous exam datasets use lmm1\_7 as the most updated version. LMM1\_7 should be used vs the values in the exam data sets.

-----  
Convention of variable names for this manual

# = EXAM CYCLE number

For example,

item number 1 "what is the date today?" for  
exam cycle 7, would be mm7\_1, item number2  
would be mm7, etc.

total cognitive function score for exam cycle 6  
would be cogscr6, for exam7 total cog score would  
be cogscr7, etc.

Note: since many exam cycles were merged together, if all the variables for a particular exam cycle are missing (dot in SAS) then most likely, the test was not administered. To ascertain exam attendance, use exam dates file.

-----  
RANDOMID      RANDOM ID

COGNITIVE FUNCTION -- PART I

MM#\_1           WHAT IS THE DATE TODAY? (MONTH, DAY, YEAR)  
(SCORE 1 POINT FOR EACH CORRECT ANSWER)  
0 NONE CORRECT  
1 1 OF 3 CORRECT  
2 2 OF 3 CORRECT  
3 3 OF 3 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

MM#\_2                   WHAT IS THE SEASON?  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 INCORRECT  
1 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

MM#\_3           WHAT DAY OF THE WEEK IS IT?  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 INCORRECT  
1 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

MM#\_4           WHAT TOWN, COUNTY AND STATE ARE WE IN?  
(SCORE 1 POINT FOR EACH CORRECT ANSWER)  
0 NONE CORRECT  
1 1 OF 3 CORRECT  
2 2 OF 3 CORRECT  
3 3 OF 3 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

MM#\_5           WHAT IS THEN NAME OF THIS PLACE?  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 INCORRECT  
1 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

MM#\_6           WHAT FLOOR OF THE BUILDING ARE WE ON?  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 INCORRECT  
1 ONE CORRECT RESPONSE  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

MM#\_7

I AM GOING TO NAME 3 OBJECTS. AFTER I HAVE SAID  
THEM I WANT YOU TO REPEAT THEM BACK TO ME.  
REMEMBER WHAT THEY ARE BECAUSE I WILL ASK YOU TO  
NAME THEM AGAIN IN A FEW MINUTES: APPLE, TABLE, PENNY.  
(SCORE 1 POINT FOR EACH CORRECT ANSWER)  
0 NONE CORRECT  
1 1 OF 3 CORRECT  
2 2 OF 3 CORRECT  
3 3 OF 3 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

RW\_WOR#

NOW I AM GOING TO SPELL A WORD FORWARD AND I  
WANT YOU TO SPELL IT BACKWARDS.  
THE WORD IS WORLD. W-O-R-L-D.  
PLEASE SPELL IT IN REVERSE ORDER.  
(LETTERS ARE ENTERED AND SCORED LATER-  
SEE NOTE BELOW ABOUT SCORING THIS VARIABLE)

MM#\_8

WHAT ARE THE 3 OBJECTS I ASKED YOU TO REMEMBER  
A FEW MOMENTS AGO?  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 NONE CORRECT  
1 1 OF 3 CORRECT  
2 2 OF 3 CORRECT  
3 3 OF 3 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST

COGNITIVE FUNCTION -- PART II

- MM#\_9           WHAT IS THIS CALLED? (WATCH)  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 INCORRECT  
1 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST
- MM#\_10           WHAT IS THIS CALLED? (PENCIL)  
(SCORE 1 POINT FOR CORRECT ANSWER)  
0 INCORRECT  
1 CORRECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST
- MM#\_11           PLEASE REPEAT THE FOLLOWING: "NO IF'S, ANDS, OR BUTS."  
(SCORE 1 POINT FOR PERFECT RESPONSE)  
0 INCORRECT  
1 PERFECT  
6 NO TRY  
. UNKNOWN OR DID NOT TAKE THE TEST
- MM#\_12           PLEASE READ THE FOLLOWING AND DO WHAT IS SAYS  
(PERFORMED=1)  
0 INCORRECT  
1 PERFORMED  
6 NO TRY OR LOW VISION  
. UNKNOWN OR DID NOT TAKE THE TEST
- MM#\_13           PLEASE WRITE A SENTENCE  
(PERFORMED=1)  
0 INCORRECT  
1 PERFORMED  
6 NO TRY OR LOW VISION  
. UNKNOWN OR DID NOT TAKE THE TEST
- MM#\_14           PLEASE COPY THIS DRAWING  
(PERFORMED=1)  
0 INCORRECT  
1 PERFORMED  
6 NO TRY OR LOW VISION  
. UNKNOWN OR DID NOT TAKE THE TEST
- MM#\_15           TAKE THIS PIECE OF PAPER IN YOUR RIGHT HAND,  
FOLD IT IN HALF WITH BOTH HANDS, AND PUT IT IN YOUR LAP  
(SCORE 1 POINT FOR EACH CORRECTLY PERFORMED ACT, CODE 6 IF LOW  
VISION)  
0 NONE PERFORMED CORRECTLY  
1 1 OF 3 PERFORMED  
2 2 OF 3 PERFORMED  
3 3 OF 3 PERFORMED  
6 NO TRY OR LOW VISION  
. UNKNOWN OR DID NOT TAKE THE TEST

WORLD#                    Note for scoring "world" variable  
SEE MASTERWORLD.SAS PROGRAM FOR SCORING  
0 POINTS  
1 POINT  
2 POINTS  
3 POINTS  
4 POINTS  
5 POINTS

COGSCR#                    0-30 TOTAL SCORE FOR COGNITIVE FUNCTION TEST

IF TEST WAS ADMINISTERED AND NUMMISS GE 8  
ACCORDING TO "NUMMISS" BELOW

NUMMISS1=NMISS(OF MMCYCLE#\_1-MMCYCLE#\_7)  
NUMMISS2=NMISS(OF MMCYCLE#\_8-MMCYCLE#\_15)  
NUMMISS3=NMISS(WORLDCYCLE#)  
NUMMISS=NUMMISS1+NUMMISS2+NUMMISS3

THEN COGSCR# IS MISSING,

IF AN ITEM WAS CODED AS 6=NO TRY THEN THE SCORE FOR THAT  
ITEM IS missing (dot). IF AN ITEM WAS CODED A 9=UNKNOWN,  
THEN THE SCORE FOR THAT ITEM IS MISSING (DOT).

OTHERWISE

COGSCR#=SUM(MM#\_1,MM#\_2,MM#\_3,MM#\_4,MM#\_5,MM#\_6,MM#\_7,WORLD#,  
MM#\_8,MM#\_9,MM#\_10,MM#\_11,MM#\_12,MM#\_13,MM#\_14,MM#\_15).

MAXCOG#                    9-30 Maximum score a participant can get based on the questions  
he/she answered. For example, If a participant did not answer  
a 5 point question, the maximum score will be 25.