

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

SAS DATASET NAME = LMM0\_26.SSD01

CONTAINS:

MMSE VARIABLES FOR ORIGINAL COHORT EXAMS 17-26  
(MMSE WAS NOT ADMINISTERED BEFORE EXAM 17)

2425 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 (lmm0\_26) and previous exam datasets use lmm0\_26 as the most updated version. LMM0\_26 should be used vs the values in the exam data sets.

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Convention of variable names for this manual

# = EXAM CYCLE number

For example,

item number 1 "what is the date today?" for  
exam cycle 18, would be mm18\_1, item number2  
would be mm18\_2, etc.

total cognitive function score for exam cycle 25  
would be cogscr25, for exam26 total cog score would  
be cogscr26, 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.

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PID            IDENTIFICATION NUMBER  
                 random id

ID            Framingham identification number  
                 deleted to preserve confidentiality see pid

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 IFS, 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(OFF MMCYCLE#\_1-MMCYCLE#\_7)  
    NUMMISS2=NMISS(OFF 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.