TITLE: LCSM model for Objective Memory and Subjective Memory;

DATA: FILE is C:\Users\ …..\Dataset.dat;

VARIABLE:NAMES ARE RESEARCHID sm\_c1 sm\_c2 sm\_c3 sm\_c4 sm\_c5 om\_c1 om\_c2 om\_c3 om\_c4 om\_c5 oe\_c1 oe\_c2 oe\_c3 oe\_c4 oe\_c5 ol\_c1 ol\_c2 ol\_c3 ol\_c4 ol\_c5 depres age edugp gender;

 Usevariables = age gender depres x1 x2 x3 x4 x5 y1 y2 y3 y4 y5 edugp\_1 edugp\_2;

 Missing are ALL(9999);

DEFINE:

 x1 = sm\_c1;

 x2 = sm\_c2;

 x3 = sm\_c3;

 x4 = sm\_c4;

 x5 = sm\_c5;

 y1 = om\_c1;

 y2 = om\_c2;

 y3 = om\_c3;

 y4 = om\_c4;

 y5 = om\_c5;

 edugp\_1 = 0;

 if(edugp\_re eq 1)then edugp\_1 = 1;

 edugp\_2 = 0;

 if(edugp\_re eq 2)then edugp\_2 = 1;

ANALYSIS: TYPE=MEANSTRUCTURE;

 ITERATIONS = 8000;

MODEL:

!For the variable y

!Oberved variables and latent level

ly1 by y1 @1;

ly2 by y2 @1;

ly3 by y3 @1;

ly4 by y4 @1;

ly5 by y5 @1;

!Autoregressive part

ly2 on ly1 @1;

ly3 on ly2 @1;

ly4 on ly3 @1;

ly5 on ly4 @1;

!Difference score on latent level

dy1 by ly2 @1;

dy2 by ly3 @1;

dy3 by ly4 @1;

dy4 by ly5 @1;

!Auto-porpotion of difference score on level

! add the starting values after \*

dy1 on ly1 \* (1);

dy2 on ly2 \* (1);

dy3 on ly3 \* (1);

dy4 on ly4 \* (1);

!Model relationship between slope and ds

sy by dy1 @1;

sy by dy2 @1;

sy by dy3 @1;

sy by dy4 @1;

y0 by ly1 @1;

! Set the means and variance to be 0

[y1@0]; [ly1@0]; [dy1@0]; ly1@0; dy1@0;

[y2@0]; [ly2@0]; [dy2@0]; ly2@0; dy2@0;

[y3@0]; [ly3@0]; [dy3@0]; ly3@0; dy3@0;

[y4@0]; [ly4@0]; [dy4@0]; ly4@0; dy4@0;

[y5@0]; [ly5@0];ly5@0;

!beginning the codes for x variables

!For the variable x

!Oberved variables and latent level

lx1 by x1 @1;

lx2 by x2 @1;

lx3 by x3 @1;

lx4 by x4 @1;

lx5 by x5 @1;

!Autoregressive part

lx2 on lx1 @1;

lx3 on lx2 @1;

lx4 on lx3 @1;

lx5 on lx4 @1;

!Difference score on latent level

dx1 by lx2 @1;

dx2 by lx3 @1;

dx3 by lx4 @1;

dx4 by lx5 @1;

!Auto-porpotion of difference score on level

! add the starting values after \*

dx1 on lx1 \* (2);

dx2 on lx2 \* (2);

dx3 on lx3 \* (2);

dx4 on lx4 \* (2);

!Model relationship between slope and ds

sx by dx1 @1;

sx by dx2 @1;

sx by dx3 @1;

sx by dx4 @1;

x0 by lx1 @1;

 !Set the means and variance to be 0

[x1@0]; [lx1@0]; [dx1@0]; lx1@0; dx1@0;

[x2@0]; [lx2@0]; [dx2@0]; lx2@0; dx2@0;

[x3@0]; [lx3@0]; [dx3@0]; lx3@0; dx3@0;

[x4@0]; [lx4@0]; [dx4@0]; lx4@0; dx4@0;

[x5@0]; [lx5@0];lx5@0;

!Covariates on the Intercept;

x0 on age \*;

x0 on edugp\_1\* ;

x0 on edugp\_2\* ;

x0 on gender\*;

x0 on depres;

y0 on age \*;

y0 on edugp\_1\* ;

y0 on edugp\_2\* ;

y0 on gender\*;

y0 on depres;

!Covariates on the Slope;

sx on age \*;

sx on edugp\_1\* ;

sx on edugp\_2\* ;

sx on gender\*;

sx on depress\*;

sy on age \*;

sy on edugp\_1\*;

sy on edugp\_2\* ;

sy on gender\*;

sy on depress\*;

!coupling from OM to SM

dx1 on ly1\*(3);

dx2 on ly2\*(3);

dx3 on ly3\*(3);

dx4 on ly4\*(3);

!coupling from SM to OM

dy1 on lx1\*(4);

dy2 on lx2\*(4);

dy3 on lx3\*(4);

dy4 on lx4\*(4);

[y0 x0 sy sx];

y0 x0 sy sx;

!Set all residuals to be equal

y1\* (5);x1\* (6);

y2\* (5);x2\* (6);

y3\* (5);x3\* (6);

y4\* (5);x4\* (6);

y5\* (5);x5\* (6);

! Set the correlated residuals

y1 with x1\* (7);

y2 with x2\* (7);

y3 with x3\* (7);

y4 with x4\* (7);

y5 with x5\* (7);

OUTPUT: sampstat standardized;