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Mplus VERSION 7
MUTHEN & MUTHEN
12/29/2023   8:14 PM

INPUT INSTRUCTIONS

  TITLE: ICSA: MIMIC;

  DATA: FILE = ICSA MIMIC.dat;

  VARIABLE:
  NAMES = Dum_JK Dum_Rlg Dum_Ets Dum_SMhs Dum_SPT Dum_CYoS
  ICSA_1-ICSA_14;

  USEVARIABLES = ICSA_1-ICSA_14
  Dum_JK Dum_Rlg Dum_Ets Dum_SMhs Dum_SPT Dum_CYoS;

  ANALYSIS:
  ESTIMATOR = MLR;

  MODEL:

  ICSA BY ICSA_1-ICSA_14;

  !MIMIC
  ICSA on Dum_JK Dum_Rlg Dum_Ets Dum_SMhs Dum_SPT Dum_CYoS;

  OUTPUT: TECH4 STDYX MODINDICES (ALL);



INPUT READING TERMINATED NORMALLY



ICSA: MIMIC;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                         589

Number of dependent variables                                   14
Number of independent variables                                  6
Number of continuous latent variables                            1

Observed dependent variables

  Continuous
   ICSA_1      ICSA_2      ICSA_3      ICSA_4      ICSA_5      ICSA_6
   ICSA_7      ICSA_8      ICSA_9      ICSA_10     ICSA_11     ICSA_12
   ICSA_13     ICSA_14

Observed independent variables
   DUM_JK      DUM_RLG     DUM_ETS     DUM_SMHS    DUM_SPT     DUM_CYOS

Continuous latent variables
   ICSA


Estimator                                                      MLR
Information matrix                                        OBSERVED
Maximum number of iterations                                  1000
Convergence criterion                                    0.500D-04
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Maximum number of steepest descent iterations 20

Input data file(s)
ICSA MIMIC.dat

Input data format FREE

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 48

Loglikelihood

H0 Value	-10607.771
H0 Scaling Correction Factor for MLR	1.4007
H1 Value	-10362.119
H1 Scaling Correction Factor for MLR	1.3329

Information Criteria

Akaike (AIC)	21311.543
Bayesian (BIC)	21521.707
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	21369.324

Chi-Square Test of Model Fit

Value	374.491*
Degrees of Freedom	155
P-Value	0.0000
Scaling Correction Factor for MLR	1.3119

* The chi-square value for MLM, MLMV, MLR, ULSMV, WLSM and WLSMV cannot be used for chi-square difference testing in the regular way. MLM, MLR and WLSM chi-square difference testing is described on the Mplus website. MLMV, WLSMV, and ULSMV difference testing is done using the DIFFTEST option.

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.049	
90 Percent C.I.	0.043	0.055
Probability RMSEA <= .05	0.589	

CFI/TLI

CFI	0.840
TLI	0.819

Chi-Square Test of Model Fit for the Baseline Model

Value	1544.947
Degrees of Freedom	175
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value 0.057

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
ICSA BY				
ICSA_1	1.000	0.000	999.000	999.000
ICSA_2	1.275	0.173	7.385	0.000
ICSA_3	1.183	0.180	6.557	0.000
ICSA_4	1.218	0.184	6.611	0.000
ICSA_5	1.507	0.229	6.581	0.000
ICSA_6	1.333	0.204	6.530	0.000
ICSA_7	1.285	0.182	7.069	0.000
ICSA_8	1.366	0.187	7.292	0.000
ICSA_9	1.493	0.234	6.373	0.000
ICSA_10	1.368	0.172	7.930	0.000
ICSA_11	1.319	0.173	7.644	0.000
ICSA_12	1.371	0.190	7.212	0.000
ICSA_13	1.207	0.181	6.680	0.000
ICSA_14	1.418	0.177	8.030	0.000
ICSA ON				
DUM_JK	0.163	0.046	3.536	0.000
DUM_RLG	-0.050	0.055	-0.917	0.359
DUM_ETS	-0.001	0.033	-0.026	0.980
DUM_SMHS	0.044	0.036	1.212	0.225
DUM_SPT	-0.031	0.039	-0.809	0.419
DUM_CYOS	-0.044	0.044	-1.004	0.315
Intercepts				
ICSA_1	3.264	0.043	75.256	0.000
ICSA_2	3.801	0.052	72.870	0.000
ICSA_3	3.891	0.054	72.308	0.000
ICSA_4	3.671	0.054	67.573	0.000
ICSA_5	3.359	0.059	56.895	0.000
ICSA_6	3.161	0.056	56.572	0.000
ICSA_7	3.497	0.050	69.366	0.000
ICSA_8	3.563	0.051	69.465	0.000
ICSA_9	3.368	0.061	54.946	0.000
ICSA_10	3.276	0.057	57.656	0.000
ICSA_11	3.637	0.049	74.373	0.000
ICSA_12	3.331	0.056	59.720	0.000
ICSA_13	3.209	0.057	56.286	0.000
ICSA_14	3.279	0.064	51.067	0.000
Residual Variances				
ICSA_1	0.515	0.050	10.261	0.000
ICSA_2	0.655	0.066	9.949	0.000
ICSA_3	0.736	0.073	10.086	0.000
ICSA_4	0.629	0.052	12.036	0.000
ICSA_5	0.717	0.074	9.698	0.000
ICSA_6	0.706	0.057	12.320	0.000
ICSA_7	0.546	0.045	12.206	0.000
ICSA_8	0.444	0.043	10.418	0.000
ICSA_9	0.881	0.075	11.708	0.000
ICSA_10	0.751	0.066	11.420	0.000
ICSA_11	0.492	0.040	12.337	0.000
ICSA_12	0.628	0.061	10.239	0.000
ICSA_13	1.093	0.079	13.749	0.000

ICSA_14	0.940	0.075	12.579	0.000
ICSA	0.139	0.033	4.209	0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
ICSA BY				
ICSA_1	0.469	0.047	9.876	0.000
ICSA_2	0.515	0.046	11.109	0.000
ICSA_3	0.465	0.047	9.812	0.000
ICSA_4	0.505	0.044	11.435	0.000
ICSA_5	0.561	0.041	13.611	0.000
ICSA_6	0.517	0.041	12.642	0.000
ICSA_7	0.552	0.036	15.505	0.000
ICSA_8	0.615	0.040	15.526	0.000
ICSA_9	0.518	0.039	13.246	0.000
ICSA_10	0.515	0.043	12.008	0.000
ICSA_11	0.582	0.039	15.074	0.000
ICSA_12	0.550	0.040	13.639	0.000
ICSA_13	0.402	0.043	9.299	0.000
ICSA_14	0.486	0.043	11.214	0.000
ICSA ON				
DUM_JK	0.190	0.048	3.962	0.000
DUM_RLG	-0.056	0.061	-0.921	0.357
DUM_ETS	-0.001	0.043	-0.026	0.980
DUM_SMHS	0.058	0.047	1.238	0.216
DUM_SPT	-0.041	0.050	-0.813	0.416
DUM_CYOS	-0.048	0.047	-1.007	0.314
Intercepts				
ICSA_1	4.018	0.198	20.247	0.000
ICSA_2	4.029	0.179	22.525	0.000
ICSA_3	4.016	0.209	19.181	0.000
ICSA_4	3.995	0.160	25.019	0.000
ICSA_5	3.284	0.149	22.100	0.000
ICSA_6	3.220	0.143	22.517	0.000
ICSA_7	3.947	0.172	22.920	0.000
ICSA_8	4.216	0.173	24.395	0.000
ICSA_9	3.070	0.140	21.953	0.000
ICSA_10	3.240	0.138	23.520	0.000
ICSA_11	4.216	0.182	23.177	0.000
ICSA_12	3.512	0.167	21.025	0.000
ICSA_13	2.811	0.121	23.257	0.000
ICSA_14	2.955	0.136	21.713	0.000
Residual Variances				
ICSA_1	0.780	0.044	17.551	0.000
ICSA_2	0.735	0.048	15.429	0.000
ICSA_3	0.784	0.044	17.806	0.000
ICSA_4	0.745	0.045	16.731	0.000
ICSA_5	0.686	0.046	14.836	0.000
ICSA_6	0.733	0.042	17.342	0.000
ICSA_7	0.696	0.039	17.709	0.000
ICSA_8	0.622	0.049	12.747	0.000
ICSA_9	0.732	0.041	18.067	0.000
ICSA_10	0.735	0.044	16.639	0.000
ICSA_11	0.662	0.045	14.735	0.000

ICSA_12	0.697	0.044	15.707	0.000
ICSA_13	0.838	0.035	24.066	0.000
ICSA_14	0.763	0.042	18.097	0.000
ICSA	0.958	0.019	49.371	0.000

R-SQUARE

Observed Variable	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
ICSA_1	0.220	0.044	4.938	0.000
ICSA_2	0.265	0.048	5.555	0.000
ICSA_3	0.216	0.044	4.906	0.000
ICSA_4	0.255	0.045	5.717	0.000
ICSA_5	0.314	0.046	6.805	0.000
ICSA_6	0.267	0.042	6.321	0.000
ICSA_7	0.304	0.039	7.752	0.000
ICSA_8	0.378	0.049	7.763	0.000
ICSA_9	0.268	0.041	6.623	0.000
ICSA_10	0.265	0.044	6.004	0.000
ICSA_11	0.338	0.045	7.537	0.000
ICSA_12	0.303	0.044	6.820	0.000
ICSA_13	0.162	0.035	4.650	0.000
ICSA_14	0.237	0.042	5.607	0.000

Latent Variable	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
ICSA	0.042	0.019	2.170	0.030

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.513E-03
(ratio of smallest to largest eigenvalue)

MODEL MODIFICATION INDICES

Minimum M.I. value for printing the modification index 10.000

		M.I.	E.P.C.	Std E.P.C.	StdYX E.P.C.
ON Statements					
ICSA_2	ON DUM_RLG	26.761	-0.480	-0.480	-0.217
ICSA_2	ON DUM_SMHS	16.678	-0.324	-0.324	-0.171
ICSA_2	ON DUM_SPT	18.262	-0.343	-0.343	-0.179
ICSA_2	ON DUM_CYOS	11.842	-0.330	-0.330	-0.144
ICSA_3	ON DUM_RLG	11.319	-0.328	-0.328	-0.144
ICSA_4	ON ICSA_8	15.915	0.250	0.250	0.230
ICSA_4	ON ICSA_11	14.155	-0.221	-0.221	-0.207
ICSA_5	ON ICSA_10	17.734	-0.213	-0.213	-0.210
ICSA_5	ON DUM_RLG	14.160	-0.369	-0.369	-0.154
ICSA_8	ON ICSA_4	15.915	0.176	0.176	0.191
ICSA_10	ON ICSA_5	17.733	-0.223	-0.223	-0.225
ICSA_10	ON ICSA_11	15.538	0.253	0.253	0.216
ICSA_10	ON DUM_RLG	20.595	0.451	0.451	0.190
ICSA_10	ON DUM_SMHS	11.689	0.290	0.290	0.143
ICSA_10	ON DUM_SPT	19.795	0.383	0.383	0.187
ICSA_11	ON ICSA_4	14.154	-0.173	-0.173	-0.184
ICSA_11	ON ICSA_10	15.537	0.166	0.166	0.195
ICSA_13	ON ICSA_14	11.485	0.182	0.182	0.177

ICSA_14	ON ICSA_13	11.485	0.156	0.156	0.161
ICSA_14	ON DUM_RLG	14.459	0.420	0.420	0.162

WITH Statements

ICSA_8	WITH ICSA_4	15.915	0.111	0.111	0.210
ICSA_10	WITH ICSA_5	17.734	-0.160	-0.160	-0.218
ICSA_11	WITH ICSA_4	14.155	-0.109	-0.109	-0.195
ICSA_11	WITH ICSA_10	15.537	0.125	0.125	0.205
ICSA_14	WITH ICSA_13	11.485	0.171	0.171	0.168
DUM_RLG	WITH ICSA_14	10.992	0.050	0.050	0.120

TECHNICAL 4 OUTPUT

ESTIMATES DERIVED FROM THE MODEL

ESTIMATED MEANS FOR THE LATENT VARIABLES

	ICSA	ICSA_1	ICSA_2	ICSA_3	ICSA_4
1	0.032	3.295	3.842	3.929	3.710

ESTIMATED MEANS FOR THE LATENT VARIABLES

	ICSA_5	ICSA_6	ICSA_7	ICSA_8	ICSA_9
1	3.407	3.204	3.538	3.606	3.416

ESTIMATED MEANS FOR THE LATENT VARIABLES

	ICSA_10	ICSA_11	ICSA_12	ICSA_13	ICSA_14
1	3.319	3.679	3.375	3.248	3.324

ESTIMATED MEANS FOR THE LATENT VARIABLES

	DUM_JK	DUM_RLG	DUM_ETS	DUM_SMHS	DUM_SPT
1	0.273	0.239	0.606	0.514	0.419

ESTIMATED MEANS FOR THE LATENT VARIABLES

	DUM_CYOS
1	0.217

ESTIMATED COVARIANCE MATRIX FOR THE LATENT VARIABLES

	ICSA	ICSA_1	ICSA_2	ICSA_3	ICSA_4
ICSA	0.145				
ICSA_1	0.145	0.660			
ICSA_2	0.185	0.185	0.890		
ICSA_3	0.171	0.171	0.219	0.939	
ICSA_4	0.177	0.177	0.225	0.209	0.844
ICSA_5	0.218	0.218	0.278	0.258	0.266
ICSA_6	0.193	0.193	0.246	0.228	0.235
ICSA_7	0.186	0.186	0.237	0.220	0.227
ICSA_8	0.198	0.198	0.252	0.234	0.241
ICSA_9	0.216	0.216	0.276	0.256	0.264
ICSA_10	0.198	0.198	0.253	0.234	0.241
ICSA_11	0.191	0.191	0.244	0.226	0.233

ICSA_12	0.199	0.199	0.253	0.235	0.242
ICSA_13	0.175	0.175	0.223	0.207	0.213
ICSA_14	0.205	0.205	0.262	0.243	0.250
DUM_JK	0.030	0.030	0.038	0.036	0.037
DUM_RLG	-0.004	-0.004	-0.005	-0.004	-0.005
DUM_ETS	0.003	0.003	0.004	0.003	0.003
DUM_SMHS	0.009	0.009	0.012	0.011	0.012
DUM_SPT	-0.010	-0.010	-0.012	-0.011	-0.012
DUM_CYOS	-0.007	-0.007	-0.009	-0.008	-0.008

ESTIMATED COVARIANCE MATRIX FOR THE LATENT VARIABLES

	ICSA_5	ICSA_6	ICSA_7	ICSA_8	ICSA_9
ICSA_5	1.046				
ICSA_6	0.291	0.964			
ICSA_7	0.280	0.248	0.785		
ICSA_8	0.298	0.264	0.254	0.714	
ICSA_9	0.326	0.288	0.278	0.295	1.204
ICSA_10	0.299	0.264	0.255	0.271	0.296
ICSA_11	0.288	0.255	0.245	0.261	0.285
ICSA_12	0.299	0.265	0.255	0.271	0.297
ICSA_13	0.264	0.233	0.225	0.239	0.261
ICSA_14	0.310	0.274	0.264	0.281	0.307
DUM_JK	0.045	0.040	0.039	0.041	0.045
DUM_RLG	-0.006	-0.005	-0.005	-0.005	-0.006
DUM_ETS	0.004	0.004	0.004	0.004	0.004
DUM_SMHS	0.014	0.013	0.012	0.013	0.014
DUM_SPT	-0.015	-0.013	-0.012	-0.013	-0.014
DUM_CYOS	-0.010	-0.009	-0.009	-0.009	-0.010

ESTIMATED COVARIANCE MATRIX FOR THE LATENT VARIABLES

	ICSA_10	ICSA_11	ICSA_12	ICSA_13	ICSA_14
ICSA_10	1.022				
ICSA_11	0.261	0.744			
ICSA_12	0.272	0.262	0.900		
ICSA_13	0.239	0.231	0.240	1.304	
ICSA_14	0.281	0.271	0.282	0.248	1.231
DUM_JK	0.041	0.040	0.041	0.036	0.043
DUM_RLG	-0.005	-0.005	-0.005	-0.005	-0.005
DUM_ETS	0.004	0.004	0.004	0.003	0.004
DUM_SMHS	0.013	0.012	0.013	0.011	0.013
DUM_SPT	-0.013	-0.013	-0.013	-0.012	-0.014
DUM_CYOS	-0.009	-0.009	-0.009	-0.008	-0.009

ESTIMATED COVARIANCE MATRIX FOR THE LATENT VARIABLES

	DUM_JK	DUM_RLG	DUM_ETS	DUM_SMHS	DUM_SPT
DUM_JK	0.199				
DUM_RLG	0.038	0.182			
DUM_ETS	0.023	0.071	0.239		
DUM_SMHS	0.029	0.091	0.080	0.250	
DUM_SPT	0.023	0.103	-0.005	0.027	0.243
DUM_CYOS	0.019	0.035	0.019	0.019	0.041

ESTIMATED COVARIANCE MATRIX FOR THE LATENT VARIABLES

	DUM_CYOS
DUM_CYOS	0.170

ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	ICSA	ICSA_1	ICSA_2	ICSA_3	ICSA_4
ICSA	1.000				
ICSA_1	0.469	1.000			
ICSA_2	0.515	0.241	1.000		
ICSA_3	0.465	0.218	0.239	1.000	
ICSA_4	0.505	0.236	0.260	0.235	1.000
ICSA_5	0.561	0.263	0.289	0.261	0.283
ICSA_6	0.517	0.242	0.266	0.240	0.261
ICSA_7	0.552	0.259	0.284	0.256	0.278
ICSA_8	0.615	0.288	0.317	0.286	0.310
ICSA_9	0.518	0.243	0.266	0.241	0.261
ICSA_10	0.515	0.241	0.265	0.239	0.260
ICSA_11	0.582	0.273	0.299	0.270	0.294
ICSA_12	0.550	0.258	0.283	0.256	0.278
ICSA_13	0.402	0.189	0.207	0.187	0.203
ICSA_14	0.486	0.228	0.250	0.226	0.245
DUM_JK	0.178	0.083	0.091	0.083	0.090
DUM_RLG	-0.023	-0.011	-0.012	-0.011	-0.012
DUM_ETS	0.015	0.007	0.008	0.007	0.008
DUM_SMHS	0.050	0.023	0.026	0.023	0.025
DUM_SPT	-0.052	-0.024	-0.027	-0.024	-0.026
DUM_CYOS	-0.042	-0.020	-0.022	-0.020	-0.021

ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	ICSA_5	ICSA_6	ICSA_7	ICSA_8	ICSA_9
ICSA_5	1.000				
ICSA_6	0.290	1.000			
ICSA_7	0.309	0.285	1.000		
ICSA_8	0.345	0.318	0.339	1.000	
ICSA_9	0.290	0.268	0.286	0.319	1.000
ICSA_10	0.289	0.266	0.284	0.317	0.267
ICSA_11	0.326	0.301	0.321	0.358	0.301
ICSA_12	0.309	0.284	0.304	0.338	0.285
ICSA_13	0.226	0.208	0.222	0.248	0.208
ICSA_14	0.273	0.251	0.268	0.299	0.252
DUM_JK	0.100	0.092	0.098	0.109	0.092
DUM_RLG	-0.013	-0.012	-0.013	-0.014	-0.012
DUM_ETS	0.008	0.008	0.008	0.009	0.008
DUM_SMHS	0.028	0.026	0.027	0.031	0.026
DUM_SPT	-0.029	-0.027	-0.029	-0.032	-0.027
DUM_CYOS	-0.024	-0.022	-0.023	-0.026	-0.022

ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	ICSA_10	ICSA_11	ICSA_12	ICSA_13	ICSA_14
ICSA_10	1.000				
ICSA_11	0.300	1.000			
ICSA_12	0.283	0.320	1.000		
ICSA_13	0.207	0.234	0.221	1.000	
ICSA_14	0.250	0.283	0.268	0.196	1.000
DUM_JK	0.091	0.103	0.098	0.071	0.086
DUM_RLG	-0.012	-0.013	-0.013	-0.009	-0.011
DUM_ETS	0.008	0.009	0.008	0.006	0.007
DUM_SMHS	0.026	0.029	0.027	0.020	0.024
DUM_SPT	-0.027	-0.030	-0.028	-0.021	-0.025
DUM_CYOS	-0.022	-0.025	-0.023	-0.017	-0.021

ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	DUM_JK	DUM_RLG	DUM_ETS	DUM_SMHS	DUM_SPT
DUM_JK	1.000				
DUM_RLG	0.200	1.000			
DUM_ETS	0.105	0.338	1.000		
DUM_SMHS	0.131	0.426	0.329	1.000	
DUM_SPT	0.104	0.491	-0.019	0.110	1.000
DUM_CYOS	0.102	0.196	0.096	0.092	0.203

ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	DUM_CYOS
DUM_CYOS	1.000

DIAGRAM INFORMATION

Use View Diagram under the Diagram menu in the Mplus Editor to view the diagram.
If running Mplus from the Mplus Diagrammer, the diagram opens automatically.

Diagram output
d:\research\pdp 2023\data\mplus\icsa\icsa mimic.dgm

Beginning Time: 20:14:36
Ending Time: 20:14:37
Elapsed Time: 00:00:01

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