

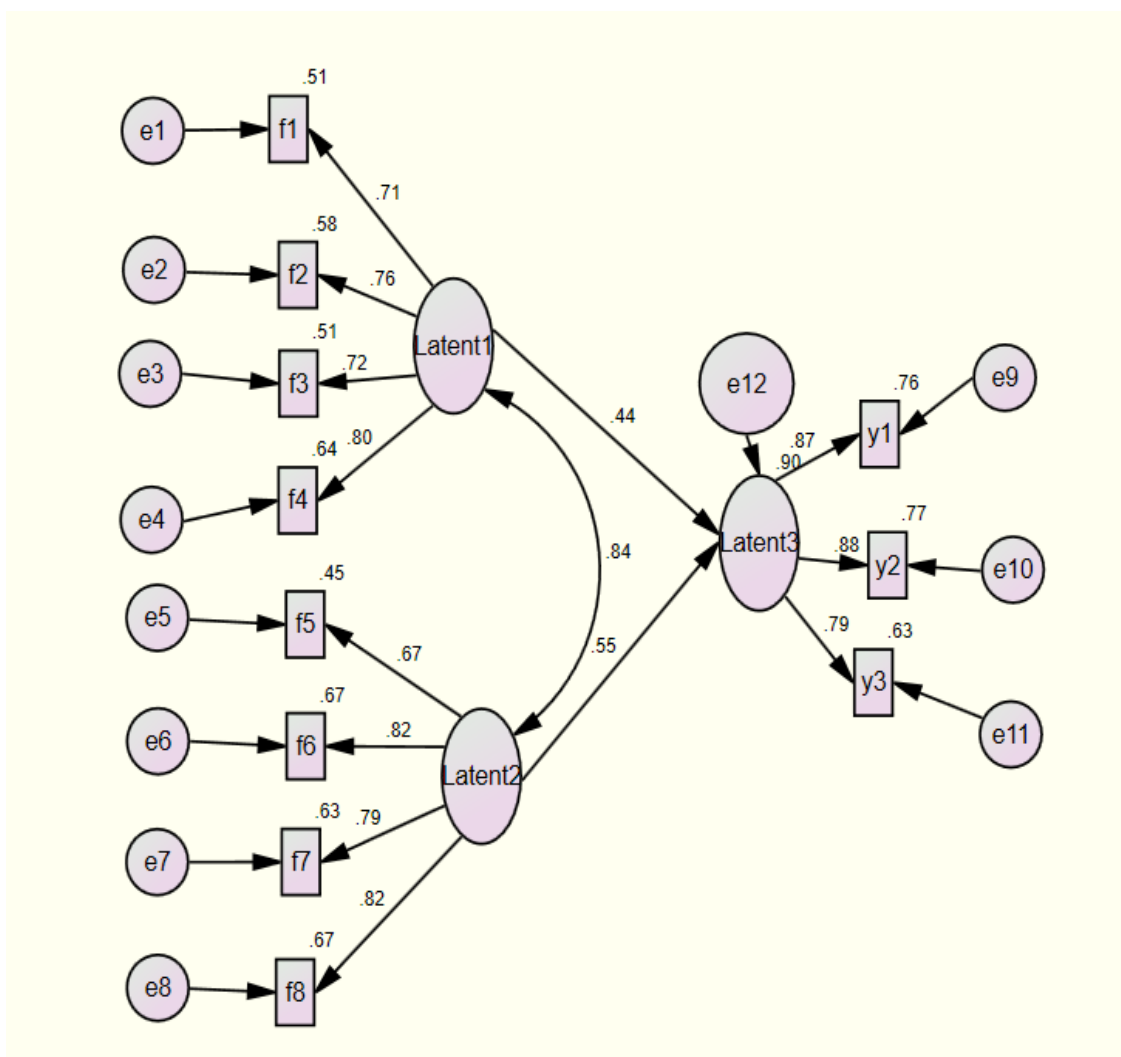
ภาคผนวก ข.

ผลการวิเคราะห์ข้อมูลเพื่อการวิจัย

การวิเคราะห์ข้อมูล

Output AMOS “ โมเดลจิตปัญญาตามแนวพุทธจิตวิทยา ”

Model ก่อนปรับ



Analysis Summary

Notes for Group (Group number 1)

The model is recursive.

Sample size = 720

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

f4

f3

f2

f1

f8

f7

f6

f5

y1

y2

y3

Unobserved, endogenous variables

Latent3

Unobserved, exogenous variables

Latent1

e4

e3

e2

e1

e8

Latent2

e7

e6

e5

e9

e10

e11

e12

Variable counts (Group number 1)

Number of variables in your model: 26

Number of observed variables: 11

Number of unobserved variables: 15

Number of exogenous variables: 14

Number of endogenous variables: 12

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	15	0	0	0	0	15
Labeled	0	0	0	0	0	0
Unlabeled	10	1	14	0	11	36
Total	25	1	14	0	11	51

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	77
Number of distinct parameters to be estimated:	36
Degrees of freedom (77 - 36):	41

Result (Default model)

Minimum was achieved

Chi-square = 178.887

Degrees of freedom = 41

Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Latent3 <--- Latent1	.955	.123	7.740	***	par_8
Latent3 <--- Latent2	1.069	.113	9.421	***	par_9
f4 <--- Latent1	1.000				
f3 <--- Latent1	.897	.045	20.088	***	par_1
f2 <--- Latent1	.987	.046	21.660	***	par_2
f1 <--- Latent1	.855	.043	19.806	***	par_3
f7 <--- Latent2	.914	.038	23.888	***	par_4
f6 <--- Latent2	1.060	.043	24.821	***	par_5
f5 <--- Latent2	.852	.045	19.066	***	par_6

			Estimate	S.E.	C.R.	P	Label
y1	<---	Latent3	1.000				
y3	<---	Latent3	.880	.034	26.191	***	par_10
y2	<---	Latent3	.948	.030	31.117	***	par_11
f8	<---	Latent2	1.000				

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Latent3	<---	Latent1	.436
Latent3	<---	Latent2	.553
f4	<---	Latent1	.800
f3	<---	Latent1	.715
f2	<---	Latent1	.764
f1	<---	Latent1	.713
f7	<---	Latent2	.791
f6	<---	Latent2	.816
f5	<---	Latent2	.672
y1	<---	Latent3	.869
y3	<---	Latent3	.794
y2	<---	Latent3	.879
f8	<---	Latent2	.817

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
f4	20.787	.110	188.368	***	par_12
f3	21.226	.111	191.774	***	par_13
f2	19.894	.114	174.458	***	par_14
f1	20.722	.106	195.901	***	par_15
f8	20.318	.123	165.774	***	par_16
f7	20.442	.116	176.606	***	par_17
f6	19.724	.130	151.779	***	par_18
f5	20.043	.127	157.895	***	par_19
y1	40.217	.222	180.799	***	par_20
y2	41.410	.209	198.408	***	par_21
y3	41.965	.214	195.974	***	par_22

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Latent2 <--> Latent1	5.310	.385	13.776	***	par_7

Correlations: (Group number 1 - Default model)

	Estimate
Latent2 <--> Latent1	.836

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Latent1	5.598	.453	12.367	***	par_23
Latent2	7.204	.557	12.926	***	par_24
e12	2.711	.465	5.830	***	par_25
e4	3.158	.217	14.551	***	par_26
e3	4.302	.262	16.442	***	par_27
e2	3.897	.251	15.557	***	par_28
e1	3.953	.240	16.456	***	par_29
e8	3.591	.241	14.877	***	par_30
e7	3.609	.231	15.613	***	par_31
e6	4.053	.273	14.851	***	par_32
e5	6.357	.367	17.315	***	par_33
e9	8.686	.622	13.953	***	par_34
e10	7.132	.544	13.116	***	par_35
e11	12.169	.754	16.134	***	par_36

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Latent3	.899
y3	.631
y2	.772
y1	.756
f5	.451
f6	.666
f7	.625
f8	.667

	Estimate
f1	.509
f2	.583
f3	.512
f4	.639

Matrices (Group number 1 - Default model)

Factor Score Weights (Group number 1 - Default model)

	y3	y2	y1	f5	f6	f7	f8	f1	f2	f3	f4
Latent1	.028	.051	.044	.014	.027	.027	.029	.132	.155	.127	.193
Latent2	.032	.059	.051	.089	.173	.168	.184	.023	.027	.022	.033
Latent3	.140	.258	.224	.059	.116	.112	.123	.082	.096	.079	.121

Total Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.955	1.069	.000
y3	.840	.940	.880
y2	.906	1.013	.948
y1	.955	1.069	1.000
f5	.000	.852	.000
f6	.000	1.060	.000
f7	.000	.914	.000
f8	.000	1.000	.000
f1	.855	.000	.000
f2	.987	.000	.000
f3	.897	.000	.000
f4	1.000	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.436	.553	.000
y3	.346	.439	.794
y2	.383	.486	.879
y1	.379	.481	.869
f5	.000	.672	.000

	Latent1	Latent2	Latent3
f6	.000	.816	.000
f7	.000	.791	.000
f8	.000	.817	.000
f1	.713	.000	.000
f2	.764	.000	.000
f3	.715	.000	.000
f4	.800	.000	.000

Direct Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.955	1.069	.000
y3	.000	.000	.880
y2	.000	.000	.948
y1	.000	.000	1.000
f5	.000	.852	.000
f6	.000	1.060	.000
f7	.000	.914	.000
f8	.000	1.000	.000
f1	.855	.000	.000
f2	.987	.000	.000
f3	.897	.000	.000
f4	1.000	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.436	.553	.000
y3	.000	.000	.794
y2	.000	.000	.879
y1	.000	.000	.869
f5	.000	.672	.000
f6	.000	.816	.000
f7	.000	.791	.000
f8	.000	.817	.000
f1	.713	.000	.000
f2	.764	.000	.000

	Latent1	Latent2	Latent3
f3	.715	.000	.000
f4	.800	.000	.000

Indirect Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.000	.000	.000
y3	.840	.940	.000
y2	.906	1.013	.000
y1	.955	1.069	.000
f5	.000	.000	.000
f6	.000	.000	.000
f7	.000	.000	.000
f8	.000	.000	.000
f1	.000	.000	.000
f2	.000	.000	.000
f3	.000	.000	.000
f4	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.000	.000	.000
y3	.346	.439	.000
y2	.383	.486	.000
y1	.379	.481	.000
f5	.000	.000	.000
f6	.000	.000	.000
f7	.000	.000	.000
f8	.000	.000	.000
f1	.000	.000	.000
f2	.000	.000	.000
f3	.000	.000	.000
f4	.000	.000	.000

Minimization History (Default model)

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTries	Ratio
0	e	6		-.629	9999.000	5161.504	0	9999.000
1	e*	4		-.226	3.498	1809.751	20	.317
2	e	2		-.301	.707	854.986	6	.893
3	e	1		-.006	.567	364.866	5	.929
4	e	0	36966.174		.196	285.737	4	.760
5	e	0	1444.715		.879	198.024	5	.000
6	e	0	1181.090		.177	179.171	1	1.017
7	e	0	1189.885		.020	178.887	1	1.011
8	e	0	1186.436		.001	178.887	1	1.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	36	178.887	41	.000	4.363
Saturated model	77	.000	0		
Independence model	11	5179.464	66	.000	78.477

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.965	.944	.973	.957	.973
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.621	.600	.604
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	137.887	100.200	183.126
Saturated model	.000	.000	.000
Independence model	5113.464	4880.628	5352.604

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.249	.192	.139	.255
Saturated model	.000	.000	.000	.000
Independence model	7.204	7.112	6.788	7.445

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.068	.058	.079	.002
Independence model	.328	.321	.336	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	250.887	252.109		
Saturated model	154.000	156.614		
Independence model	5201.464	5201.838		

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.349	.297	.412	.351
Saturated model	.214	.214	.214	.218
Independence model	7.234	6.910	7.567	7.235

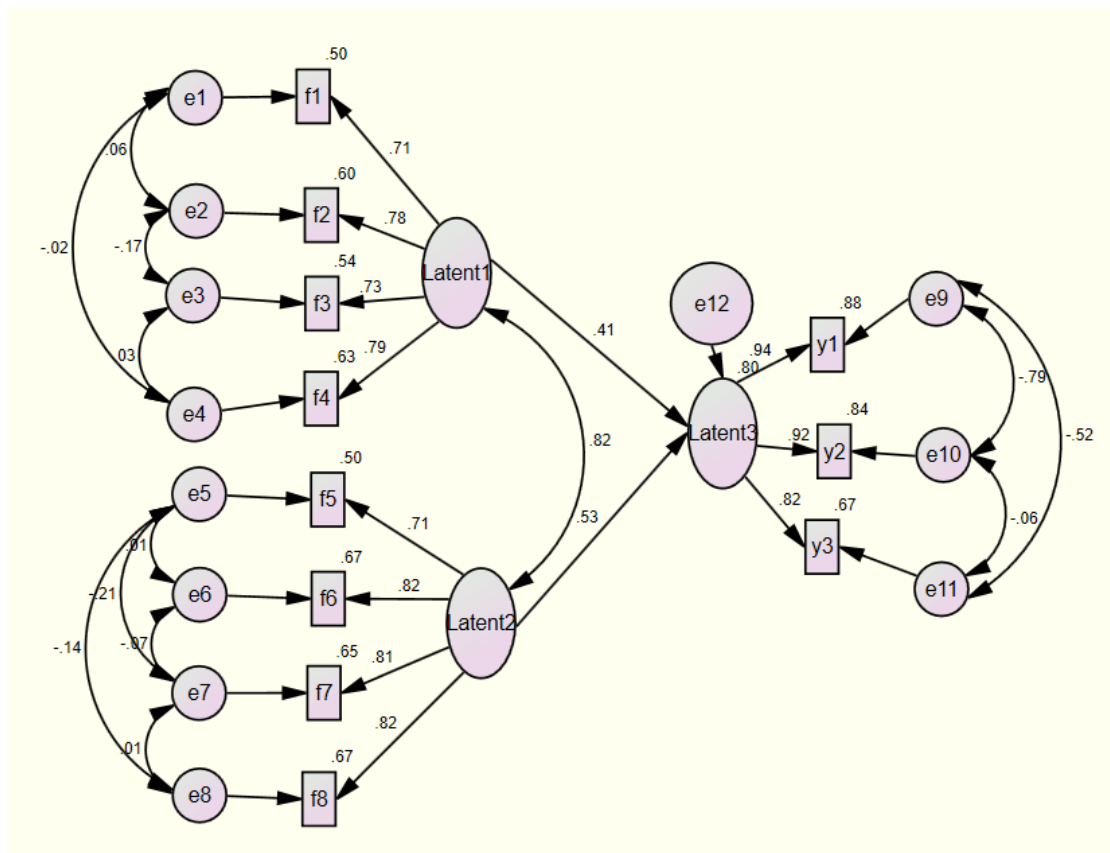
HOELTER

Model	HOELTER .05	HOELTER .01
Default model	229	262
Independence model	12	14

Execution time summary

Minimization:	.036
Miscellaneous:	1.331
Bootstrap:	.000
Total:	1.367

Model หลังปรับค่าตามModification ind



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Notes for Group (Group number 1)

The model is recursive.

Sample size = 720

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

f4

f3

f2

f1

f8

f7

f6

f5

y1
 y2
 y3
 Unobserved, endogenous variables
 Latent3
 Unobserved, exogenous variables
 Latent1
 e4
 e3
 e2
 e1
 e8
 Latent2
 e7
 e6
 e5
 e9
 e10
 e11
 e12

Variable counts (Group number 1)

Number of variables in your model: 26
 Number of observed variables: 11
 Number of unobserved variables: 15
 Number of exogenous variables: 14
 Number of endogenous variables: 12

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	15	0	0	0	0	15
Labeled	0	0	0	0	0	0
Unlabeled	10	13	14	0	11	48
Total	25	13	14	0	11	63

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 77
 Number of distinct parameters to be estimated: 48
 Degrees of freedom (77 - 48): 29

Result (Default model)

Minimum was achieved

The model is probably unidentified. In order to achieve identifiability, it will probably be necessary to impose 1 additional constraint.

Chi-square = 111.810

Degrees of freedom (corrected for nonidentifiability) = 30

Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Latent3 <--- Latent1	.970	par_8			
Latent3 <--- Latent2	1.100	par_9			
f4 <--- Latent1	1.000				
f3 <--- Latent1	.927	.046	19.970	***	par_1
f2 <--- Latent1	1.010	.049	20.455	***	par_2
f1 <--- Latent1	.855	.046	18.573	***	par_3
f7 <--- Latent2	.929	.040	23.228	***	par_4
f6 <--- Latent2	1.061	.045	23.686	***	par_5
f5 <--- Latent2	.892	.050	18.013	***	par_6
y1 <--- Latent3	1.000				
y3 <--- Latent3	.840	par_10			
y2 <--- Latent3	.914	par_11			
f8 <--- Latent2	1.000				

Standardized Regression Weights: (Group number 1 - Default model)

	Estimate
Latent3 <--- Latent1	.406
Latent3 <--- Latent2	.529
f4 <--- Latent1	.793
f3 <--- Latent1	.733
f2 <--- Latent1	.775
f1 <--- Latent1	.707
f7 <--- Latent2	.806
f6 <--- Latent2	.820
f5 <--- Latent2	.707
y1 <--- Latent3	.940
y3 <--- Latent3	.821
y2 <--- Latent3	.916
f8 <--- Latent2	.820

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
f4	20.787	.110	188.367	***	par_24
f3	21.226	.111	191.770	***	par_25
f2	19.894	.114	174.467	***	par_26
f1	20.722	.106	195.900	***	par_27
f8	20.318	.123	165.770	***	par_28
f7	20.442	.116	176.606	***	par_29
f6	19.724	.130	151.779	***	par_30
f5	20.043	.127	157.895	***	par_31
y1	40.217	.222	180.799	***	par_32
y2	41.410	.209	198.407	***	par_33
y3	41.965	.214	195.973	***	par_34

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Latent2 <--> Latent1	5.198				par_7
e2 <--> e1	.232				par_12
e3 <--> e2	-.646				par_13
e4 <--> e3	.117				par_14

			Estimate	S.E.	C.R.	P	Label
e4	<-->	e1	-.068	par_15			
e6	<-->	e5	.048	par_16			
e7	<-->	e6	-.263	par_17			
e8	<-->	e7	.044	par_18			
e8	<-->	e5	-.630	par_19			
e9	<-->	e10	-3.628	par_20			
e10	<-->	e11	-.445	par_21			
e9	<-->	e11	-3.501	par_22			
e7	<-->	e5	-.908	par_23			

Correlations: (Group number 1 - Default model)

			Estimate
Latent2	<-->	Latent1	.822
e2	<-->	e1	.060
e3	<-->	e2	-.166
e4	<-->	e3	.032
e4	<-->	e1	-.019
e6	<-->	e5	.010
e7	<-->	e6	-.072
e8	<-->	e7	.013
e8	<-->	e5	-.139
e9	<-->	e10	-.793
e10	<-->	e11	-.060
e9	<-->	e11	-.524
e7	<-->	e5	-.205

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Latent1	5.506	par_35			
Latent2	7.261	par_36			
e12	6.386	par_37			
e4	3.250	par_38			
e3	4.082	par_39			
e2	3.728	par_40			
e1	4.021	par_41			

	Estimate	S.E.	C.R.	P	Label
e8	3.535	par_42			
e7	3.368	par_43			
e6	3.975	par_44			
e5	5.803	par_45			
e9	4.140	par_46			
e10	5.058	par_47			
e11	10.770	par_48			

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Latent3	.797
y3	.673
y2	.839
y1	.884
f5	.499
f6	.673
f7	.650
f8	.673
f1	.500
f2	.601
f3	.537
f4	.629

Matrices (Group number 1 - Default model)

Factor Score Weights (Group number 1 - Default model)

	y3	y2	y1	f5	f6	f7	f8	f1	f2	f3	f4
Latent1	.018	.039	.051	.019	.022	.028	.025	.117	.179	.156	.177
Latent2	.020	.042	.054	.138	.164	.204	.183	.015	.024	.021	.023
Latent3	.180	.380	.496	.001	.001	.002	.002	.001	.001	.001	.001

Total Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.970	1.100	.000
y3	.815	.924	.840

	Latent1	Latent2	Latent3
y2	.886	1.005	.914
y1	.970	1.100	1.000
f5	.000	.892	.000
f6	.000	1.061	.000
f7	.000	.929	.000
f8	.000	1.000	.000
f1	.855	.000	.000
f2	1.010	.000	.000
f3	.927	.000	.000
f4	1.000	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.406	.529	.000
y3	.333	.434	.821
y2	.372	.484	.916
y1	.381	.497	.940
f5	.000	.707	.000
f6	.000	.820	.000
f7	.000	.806	.000
f8	.000	.820	.000
f1	.707	.000	.000
f2	.775	.000	.000
f3	.733	.000	.000
f4	.793	.000	.000

Direct Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.970	1.100	.000
y3	.000	.000	.840
y2	.000	.000	.914
y1	.000	.000	1.000
f5	.000	.892	.000
f6	.000	1.061	.000
f7	.000	.929	.000

	Latent1	Latent2	Latent3
f8	.000	1.000	.000
f1	.855	.000	.000
f2	1.010	.000	.000
f3	.927	.000	.000
f4	1.000	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.406	.529	.000
y3	.000	.000	.821
y2	.000	.000	.916
y1	.000	.000	.940
f5	.000	.707	.000
f6	.000	.820	.000
f7	.000	.806	.000
f8	.000	.820	.000
f1	.707	.000	.000
f2	.775	.000	.000
f3	.733	.000	.000
f4	.793	.000	.000

Indirect Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.000	.000	.000
y3	.815	.924	.000
y2	.886	1.005	.000
y1	.970	1.100	.000
f5	.000	.000	.000
f6	.000	.000	.000
f7	.000	.000	.000
f8	.000	.000	.000
f1	.000	.000	.000
f2	.000	.000	.000
f3	.000	.000	.000
f4	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	Latent1	Latent2	Latent3
Latent3	.000	.000	.000
y3	.333	.434	.000
y2	.372	.484	.000
y1	.381	.497	.000
f5	.000	.000	.000
f6	.000	.000	.000
f7	.000	.000	.000
f8	.000	.000	.000
f1	.000	.000	.000
f2	.000	.000	.000
f3	.000	.000	.000
f4	.000	.000	.000

Minimization History (Default model)

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTries	Ratio
0	e	14		-.996	9999.000	5161.504	0	9999.000
1	e	13		-.440	2.483	2225.111	21	.426
2	e	5		-.296	.668	1499.032	6	.684
3	e	2		-.138	.808	482.835	5	.895
4	e	1		-.032	.241	266.868	5	.927
5	e	1		-.017	.300	173.141	6	.796
6	e	1		-.001	.600	116.058	8	.830
7	e	1		.000	.111	111.867	5	1.034
8	e	1		.000	.016	111.810	5	1.008
9	e	1		.000	.001	111.810	5	1.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	48	111.810	30	.000	3.727
Saturated model	77	.000	0		
Independence model	11	5179.464	66	.000	78.477

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.978	.953	.984	.965	.984
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.455	.445	.447
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	81.810	53.156	118.045
Saturated model	.000	.000	.000
Independence model	5113.464	4880.628	5352.604

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.156	.114	.074	.164
Saturated model	.000	.000	.000	.000
Independence model	7.204	7.112	6.788	7.445

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.062	.050	.074	.055
Independence model	.328	.321	.336	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	207.810	209.440		
Saturated model	154.000	156.614		
Independence model	5201.464	5201.838		

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.289	.249	.339	.291
Saturated model	.214	.214	.214	.218
Independence model	7.234	6.910	7.567	7.235

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	282	328
Independence model	12	14

Execution time summary

Minimization: .056
 Miscellaneous: 1.028
 Bootstrap: .000
 Total: 1.084