

C:\CH11_HBAT_STRUC_AMOS.amw

Analysis Summary

Date and Time

Date:
Time:

Title

Ch11_hbat_struc_amos

Groups

Group number 1 (Group number 1)

Notes for Group (Group number 1)

The model is recursive.
Sample size = 400

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

EP1
EP2
EP3
EP4
SI1
SI2
SI3
SI4
OC4
OC3
OC2
OC1
AC4
AC3
AC2
AC1
JS4
JS5
JS3
JS2
JS1

Unobserved, endogenous variables

SIT
OCC
JSS

Unobserved, exogenous variables

EPI
td1
td2
td3
td4
te10
te11
te12
te13
te9
te8
te7
te6
ACC
td8
td7
td6
td5
te4
te5
te3
te2
te1
ZJS
ZOC
ZSI

Variable counts (Group number 1)

Number of variables in your model: 50
 Number of observed variables: 21
 Number of unobserved variables: 29
 Number of exogenous variables: 26
 Number of endogenous variables: 24

Parameter Summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	29	0	0	26	3	58
Labeled	0	0	0	0	0	0
Unlabeled	23	1	26	0	21	71
Total	52	1	26	26	24	129

Models**Default model (Default model)****Notes for Model (Default model)****Computation of degrees of freedom (Default model)**

Number of distinct sample moments: 252
 Number of distinct parameters to be estimated: 71
 Degrees of freedom (252 - 71): 181

Result (Default model)

Minimum was achieved
 Chi-square = 284.487
 Degrees of freedom = 181
 Probability level = .000

Group number 1 (Group number 1 - Default model)**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
JSS <--- EPI	2.991	.743	4.026	***	
JSS <--- ACC	-.116	.673	-.173	.863	
OCC <--- JSS	.010	.006	1.616	.106	
OCC <--- EPI	.610	.082	7.401	***	
OCC <--- ACC	.262	.068	3.874	***	
SIT <--- JSS	.006	.002	2.378	.017	
SIT <--- OCC	.229	.023	9.860	***	
EP1 <--- EPI	1.000				
EP2 <--- EPI	1.041	.074	14.062	***	
EP3 <--- EPI	.819	.060	13.610	***	
EP4 <--- EPI	.909	.064	14.254	***	
SI1 <--- SIT	1.000				
SI2 <--- SIT	1.076	.055	19.645	***	
SI3 <--- SIT	1.058	.066	15.956	***	
SI4 <--- SIT	1.158	.061	19.093	***	
OC4 <--- OCC	1.000				
OC3 <--- OCC	.674	.049	13.771	***	
OC2 <--- OCC	1.130	.059	19.295	***	
OC1 <--- OCC	.852	.072	11.790	***	
AC4 <--- ACC	1.000				
AC3 <--- ACC	.904	.049	18.605	***	
AC2 <--- ACC	1.078	.059	18.160	***	
AC1 <--- ACC	.872	.048	18.206	***	
JS4 <--- JSS	.060	.005	12.810	***	
JS5 <--- JSS	1.000				
JS3 <--- JSS	.059	.005	12.385	***	
JS2 <--- JSS	.068	.005	13.521	***	
JS1 <--- JSS	.066	.005	13.378	***	

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

	Estimate
JSS <--- EPI	.251
JSS <--- ACC	-.010
OCC <--- JSS	.085
OCC <--- EPI	.452

OCC <--- ACC	.201
SIT <--- JSS	.121
SIT <--- OCC	.553
EP1 <--- EPI	.690
EP2 <--- EPI	.809
EP3 <--- EPI	.776
EP4 <--- EPI	.824
SI1 <--- SIT	.813
SI2 <--- SIT	.869
SI3 <--- SIT	.738
SI4 <--- SIT	.848
OC4 <--- OCC	.832
OC3 <--- OCC	.656
OC2 <--- OCC	.884
OC1 <--- OCC	.577
AC4 <--- ACC	.815
AC3 <--- ACC	.837
AC2 <--- ACC	.820
AC1 <--- ACC	.822
JS4 <--- JSS	.705
JS5 <--- JSS	.732
JS3 <--- JSS	.680
JS2 <--- JSS	.748
JS1 <--- JSS	.739

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
EP1	8.527	.092	93.145	***	
EP2	8.847	.081	108.682	***	
EP3	8.927	.067	133.765	***	
EP4	5.828	.070	83.542	***	
JS1	4.198	.067	62.695	***	
JS2	4.203	.068	61.362	***	
JS3	3.215	.066	48.843	***	
JS4	2.668	.064	41.646	***	
SI1	4.202	.044	96.514	***	
SI2	4.205	.044	95.847	***	
SI3	3.472	.051	68.371	***	
SI4	3.480	.048	71.904	***	
JS5	54.832	1.030	53.239	***	
OC4	8.405	.103	81.864	***	
OC3	8.655	.088	98.654	***	
OC2	8.417	.109	77.000	***	
OC1	4.887	.126	38.712	***	
AC4	3.212	.081	39.851	***	
AC3	2.775	.071	39.104	***	
AC2	3.552	.086	41.160	***	
AC1	2.760	.070	39.608	***	

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
ACC <--> EPI	.421	.100	4.203	***	

Correlations: (Group number 1 - Default model)

	Estimate
ACC <--> EPI	.254

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
EPI	1.594	.214	7.433	***	
ACC	1.722	.181	9.527	***	
ZJS	212.520	27.145	7.829	***	
ZOC	1.985	.218	9.103	***	
ZSI	.326	.037	8.931	***	
td1	1.750	.144	12.183	***	
td2	.916	.092	9.998	***	
td3	.708	.065	10.845	***	
td4	.621	.065	9.484	***	
te10	.256	.023	10.992	***	
te11	.189	.021	9.162	***	
te12	.469	.038	12.244	***	
te13	.263	.026	9.985	***	
te9	1.293	.136	9.506	***	

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

Matrices (Group number 1 - Default model)

Implied Covariances (Group number 1 - Default model)

Implied Correlations (Group number 1 - Default model)

[illegible]

[illegible]

Implied Means (Group number 1 - Default model)

	JS1	JS2	JS3	JS5	JS4	AC1	AC2	AC3	AC4	OC1	OC2	OC3	OC4	SI4	SI3	SI2	SI1	EP4	EP3	EP2
	4.198	4.203	3.215	54.832	2.668	2.760	3.552	2.775	3.212	4.887	8.417	8.655	8.405	3.480	3.472	4.205	4.202	5.828	8.927	8.847

Total Effects (Group number 1 - Default model)

	EPI	ACC	JSS	OCC	SIT
JSS	2.991	-.116	.000	.000	.000
OCC	.639	.260	.010	.000	.000
SIT	.164	.059	.008	.229	.000
JS1	.196	-.008	.066	.000	.000
JS2	.203	-.008	.068	.000	.000
JS3	.178	-.007	.059	.000	.000
JS5	2.991	-.116	1.000	.000	.000
JS4	.179	-.007	.060	.000	.000
AC1	.000	.872	.000	.000	.000
AC2	.000	1.078	.000	.000	.000
AC3	.000	.904	.000	.000	.000
AC4	.000	1.000	.000	.000	.000
OC1	.545	.222	.008	.852	.000
OC2	.723	.294	.011	1.130	.000
OC3	.431	.175	.007	.674	.000
OC4	.639	.260	.010	1.000	.000
SI4	.189	.068	.009	.265	1.158
SI3	.173	.062	.008	.242	1.058
SI2	.176	.063	.009	.246	1.076
SI1	.164	.059	.008	.229	1.000
EP4	.909	.000	.000	.000	.000
EP3	.819	.000	.000	.000	.000
EP2	1.041	.000	.000	.000	.000
EP1	1.000	.000	.000	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	EPI	ACC	JSS	OCC	SIT
JSS	.251	-.010	.000	.000	.000
OCC	.473	.200	.085	.000	.000
SIT	.292	.109	.168	.553	.000
JS1	.185	-.007	.739	.000	.000
JS2	.188	-.008	.748	.000	.000
JS3	.171	-.007	.680	.000	.000
JS5	.184	-.007	.732	.000	.000
JS4	.177	-.007	.705	.000	.000
AC1	.000	.822	.000	.000	.000
AC2	.000	.820	.000	.000	.000
AC3	.000	.837	.000	.000	.000
AC4	.000	.815	.000	.000	.000
OC1	.273	.115	.049	.577	.000
OC2	.418	.177	.075	.884	.000
OC3	.310	.131	.056	.656	.000
OC4	.394	.167	.071	.832	.000
SI4	.247	.093	.143	.468	.848
SI3	.215	.081	.124	.408	.738
SI2	.253	.095	.146	.480	.869
SI1	.237	.089	.137	.449	.813
EP4	.824	.000	.000	.000	.000
EP3	.776	.000	.000	.000	.000
EP2	.809	.000	.000	.000	.000
EP1	.690	.000	.000	.000	.000

Direct Effects (Group number 1 - Default model)

	EPI	ACC	JSS	OCC	SIT
JSS	2.991	-.116	.000	.000	.000
OCC	.610	.262	.010	.000	.000
SIT	.000	.000	.006	.229	.000
JS1	.000	.000	.066	.000	.000
JS2	.000	.000	.068	.000	.000
JS3	.000	.000	.059	.000	.000
JS5	.000	.000	1.000	.000	.000
JS4	.000	.000	.060	.000	.000
AC1	.000	.872	.000	.000	.000
AC2	.000	1.078	.000	.000	.000
AC3	.000	.904	.000	.000	.000
AC4	.000	1.000	.000	.000	.000
OC1	.000	.000	.000	.852	.000
OC2	.000	.000	.000	1.130	.000
OC3	.000	.000	.000	.674	.000
OC4	.000	.000	.000	1.000	.000
SI4	.000	.000	.000	.000	1.158
SI3	.000	.000	.000	.000	1.058
SI2	.000	.000	.000	.000	1.076
SI1	.000	.000	.000	.000	1.000
EP4	.909	.000	.000	.000	.000
EP3	.819	.000	.000	.000	.000
EP2	1.041	.000	.000	.000	.000
EP1	1.000	.000	.000	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	EPI	ACC	JSS	OCC	SIT
JSS	.251	-.010	.000	.000	.000
OCC	.452	.201	.085	.000	.000
SIT	.000	.000	.121	.553	.000
JS1	.000	.000	.739	.000	.000
JS2	.000	.000	.748	.000	.000
JS3	.000	.000	.680	.000	.000
JS5	.000	.000	.732	.000	.000
JS4	.000	.000	.705	.000	.000
AC1	.000	.822	.000	.000	.000
AC2	.000	.820	.000	.000	.000
AC3	.000	.837	.000	.000	.000
AC4	.000	.815	.000	.000	.000
OC1	.000	.000	.000	.577	.000
OC2	.000	.000	.000	.884	.000
OC3	.000	.000	.000	.656	.000
OC4	.000	.000	.000	.832	.000
SI4	.000	.000	.000	.000	.848
SI3	.000	.000	.000	.000	.738
SI2	.000	.000	.000	.000	.869
SI1	.000	.000	.000	.000	.813
EP4	.824	.000	.000	.000	.000
EP3	.776	.000	.000	.000	.000
EP2	.809	.000	.000	.000	.000
EP1	.690	.000	.000	.000	.000

Indirect Effects (Group number 1 - Default model)

	EPI	ACC	JSS	OCC	SIT
JSS	.000	.000	.000	.000	.000
OCC	.029	-.001	.000	.000	.000
SIT	.164	.059	.002	.000	.000
JS1	.196	-.008	.000	.000	.000
JS2	.203	-.008	.000	.000	.000
JS3	.178	-.007	.000	.000	.000
JS5	2.991	-.116	.000	.000	.000
JS4	.179	-.007	.000	.000	.000
AC1	.000	.000	.000	.000	.000
AC2	.000	.000	.000	.000	.000
AC3	.000	.000	.000	.000	.000
AC4	.000	.000	.000	.000	.000
OC1	.545	.222	.008	.000	.000
OC2	.723	.294	.011	.000	.000
OC3	.431	.175	.007	.000	.000
OC4	.639	.260	.010	.000	.000
SI4	.189	.068	.009	.265	.000
SI3	.173	.062	.008	.242	.000

SI2	.176	.063	.009	.246	.000
SI1	.164	.059	.008	.229	.000
EP4	.000	.000	.000	.000	.000
EP3	.000	.000	.000	.000	.000
EP2	.000	.000	.000	.000	.000
EP1	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	EPI	ACC	JSS	OCC	SIT
JSS	.000	.000	.000	.000	.000
OCC	.021	-.001	.000	.000	.000
SIT	.292	.109	.047	.000	.000
JS1	.185	-.007	.000	.000	.000
JS2	.188	-.008	.000	.000	.000
JS3	.171	-.007	.000	.000	.000
JS5	.184	-.007	.000	.000	.000
JS4	.177	-.007	.000	.000	.000
AC1	.000	.000	.000	.000	.000
AC2	.000	.000	.000	.000	.000
AC3	.000	.000	.000	.000	.000
AC4	.000	.000	.000	.000	.000
OC1	.273	.115	.049	.000	.000
OC2	.418	.177	.075	.000	.000
OC3	.310	.131	.056	.000	.000
OC4	.394	.167	.071	.000	.000
SI4	.247	.093	.143	.468	.000
SI3	.215	.081	.124	.408	.000
SI2	.253	.095	.146	.480	.000
SI1	.237	.089	.137	.449	.000
EP4	.000	.000	.000	.000	.000
EP3	.000	.000	.000	.000	.000
EP2	.000	.000	.000	.000	.000
EP1	.000	.000	.000	.000	.000

Minimization History (Default model)

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTries	Ratio
0	e		10	-.552	9999.000	4384.295	0	9999.000
1	e*		7	-.114	4.166	1548.837	20	.357
2	e*		1	-.039	1.291	721.096	5	.677
3	e	0	1649.281		.822	395.367	5	.974
4	e	0	518.370		.526	329.562	3	.000
5	e	0	656.617		.480	289.557	1	.996
6	e	0	823.380		.103	284.549	1	1.058
7	e	0	840.747		.017	284.487	1	1.015
8	e	0	846.878		.000	284.487	1	1.001

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	71	284.487	181	.000	1.572
Saturated model	252	.000	0		
Independence model	21	4440.904	231	.000	19.225

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.936	.918	.976	.969	.975
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.784	.733	.764
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	103.487	61.593	153.318

Saturated model	.000	.000	.000
Independence model	4209.904	3997.096	4429.984

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.713	.259	.154	.384
Saturated model	.000	.000	.000	.000
Independence model	11.130	10.551	10.018	11.103

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.038	.029	.046	.993
Independence model	.214	.208	.219	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	426.487	434.774		
Saturated model	504.000	533.411		
Independence model	4482.904	4485.355		

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.069	.964	1.194	1.090
Saturated model	1.263	1.263	1.263	1.337
Independence model	11.235	10.702	11.787	11.241

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	300	321
Independence model	25	26

Execution time summary

Minimization: .014
Miscellaneous: .387
Bootstrap: .000
Total: .401