

APPENDIX E

SPSS OUTPUT FOR CONFIRMATORY FACTOR ANALYSIS

AMOS OUTPUT FOR MEASUREMENT MODEL

Analysis Summary

Date and Time

Date: Saturday, August 08, 2009

Time: 7:18:50 PM

Title

2nd draft unidimensionality: Saturday, August 08, 2009 07:18 PM

Notes for Group (Group number 1)

The model is recursive.

Sample size = 820

Variable counts (Group number 1)

Number of variables in your model: 81

Number of observed variables: 36

Number of unobserved variables: 45

Number of exogenous variables: 45

Number of endogenous variables: 36

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	45	0	0	0	0	45
Labeled	0	0	0	0	0	0
Unlabeled	27	36	45	0	0	108
Total	72	36	45	0	0	153

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 666

Number of distinct parameters to be estimated: 108

Degrees of freedom (666 - 108): 558

Result (Default model)

Minimum was achieved

Chi-square = 1293.706

Degrees of freedom = 558

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
RM_1_1	<--- RM	1.000				
RM_19_3	<--- RM	.911	.052	17.539	***	par_1
IM_12_10	<--- IA	1.000				
IM_11_6	<--- IA	1.070	.045	23.567	***	par_2
RM_14_4	<--- IA	.985	.038	26.230	***	par_3
KC_18_19	<--- KC	.939	.043	21.752	***	par_4
KC_4_21	<--- KC	.878	.044	19.840	***	par_5
RM_5_5	<--- RM	1.107	.055	19.978	***	par_6
IM_9_9	<--- IA	.867	.045	19.076	***	par_7
KC_8_17	<--- KC	.675	.040	16.917	***	par_8
KC_21_16	<--- KC	.966	.051	18.797	***	par_9
IM_3_8	<--- IA	.880	.045	19.703	***	par_10
RM_7_2	<--- RM	1.107	.052	21.097	***	par_11
REG_61_29	<--- REG	1.021	.037	27.572	***	par_12
REG_63_31	<--- REG	.751	.039	19.386	***	par_13
FC_29_41	<--- FC	1.000				
FC_36_42	<--- FC	1.003	.043	23.248	***	par_14
FC_24_40	<--- FC	.796	.042	18.797	***	par_15
KC_20_20	<--- KC	1.000				
RECODE_BS_44_59	<--- BS	.598	.044	13.513	***	par_16
REG_38_25	<--- REG	.580	.039	14.825	***	par_17
CC_53_37	<--- CC	1.000				
PS_66_55	<--- PS	.976	.087	11.223	***	par_18
REG_34_24	<--- REG	.794	.045	17.828	***	par_19
REG_57_28	<--- REG	.947	.036	26.208	***	par_20
MTV_33_63	<--- MTV	1.296	.107	12.104	***	par_21
CC_58_38	<--- CC	.975	.139	7.028	***	par_22
PS_60_53	<--- PS	1.106	.092	12.040	***	par_23
PS_31_48	<--- PS	.934	.085	10.979	***	par_24
PS_37_49	<--- PS	1.000				
BS_26_56	<--- BS	.995	.053	18.903	***	par_25
CC_62_39	<--- CC	1.166	.127	9.209	***	par_26
BS_32_57	<--- BS	1.000				
REG_65_30	<--- REG	1.000				
MTV_45_65	<--- MTV	1.000				
PS_64_54	<--- PS	1.079	.092	11.751	***	par_63

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

		Estimate
RM_1_1	<--- RM	.703
RM_19_3	<--- RM	.677
IM_12_10	<--- IA	.830
IM_11_6	<--- IA	.751
RM_14_4	<--- IA	.804
KC_18_19	<--- KC	.781
KC_4_21	<--- KC	.705
RM_5_5	<--- RM	.780
IM_9_9	<--- IA	.646
KC_8_17	<--- KC	.619
KC_21_16	<--- KC	.676
IM_3_8	<--- IA	.670
RM_7_2	<--- RM	.838
REG_61_29	<--- REG	.850
REG_63_31	<--- REG	.639
FC_29_41	<--- FC	.852
FC_36_42	<--- FC	.840
FC_24_40	<--- FC	.646
KC_20_20	<--- KC	.783
RECODE_BS_44_59	<--- BS	.501
REG_38_25	<--- REG	.516
CC_53_37	<--- CC	.497
PS_66_55	<--- PS	.585
REG_34_24	<--- REG	.603
REG_57_28	<--- REG	.827
MTV_33_63	<--- MTV	.834
CC_58_38	<--- CC	.528
PS_60_53	<--- PS	.634
PS_31_48	<--- PS	.536
PS_37_49	<--- PS	.557
BS_26_56	<--- BS	.834
CC_62_39	<--- CC	.627
BS_32_57	<--- BS	.870
REG_65_30	<--- REG	.822
MTV_45_65	<--- MTV	.643
PS_64_54	<--- PS	.634

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
FC <-->MTV	.560	.080	6.978	***	par_27
REG<-->MTV	-.195	.067	-2.916	.004	par_28
BS <-->MTV	.360	.083	4.340	***	par_29
PS <-->MTV	.054	.052	1.033	.301	par_30
CC <-->MTV	.228	.061	3.709	***	par_31
KC <-->MTV	.805	.094	8.579	***	par_32
IA <-->MTV	.661	.080	8.246	***	par_33
RM <-->MTV	.550	.079	6.938	***	par_34
REG<-->FC	.168	.071	2.346	.019	par_35
FC <-->BS	.861	.096	8.977	***	par_36
FC <-->PS	.314	.061	5.130	***	par_37
FC <-->CC	.348	.068	5.116	***	par_38
KC <-->FC	.492	.081	6.071	***	par_39
IA <-->FC	.549	.072	7.638	***	par_40
RM <-->FC	.289	.070	4.155	***	par_41
REG<-->BS	.216	.084	2.581	.010	par_42
REG<-->PS	.310	.057	5.451	***	par_43
REG<-->CC	-.174	.064	-2.718	.007	par_44
KC <-->REG	.065	.074	.871	.384	par_45
IA <-->REG	-.341	.066	-5.132	***	par_46
RM <-->REG	-.481	.070	-6.866	***	par_47
BS <-->PS	.263	.070	3.755	***	par_48
BS <-->CC	.330	.078	4.251	***	par_49
KC <-->BS	.387	.093	4.168	***	par_50
IA <-->BS	.226	.080	2.832	.005	par_51
RM <-->BS	.052	.080	.647	.517	par_52
CC <-->PS	.293	.058	5.063	***	par_53
KC <-->PS	.231	.061	3.796	***	par_54
IA <-->PS	.061	.051	1.183	.237	par_55
RM <-->PS	.104	.052	1.985	.047	par_56
KC <-->CC	.125	.067	1.865	.062	par_57
IA <-->CC	.362	.063	5.718	***	par_58
RM <-->CC	.309	.064	4.835	***	par_59
IA <-->KC	.676	.078	8.690	***	par_60
RM <-->KC	.681	.081	8.367	***	par_61
RM <-->IA	1.104	.085	12.947	***	par_62

Correlations: (Group number 1 - Default model)

	Estimate
FC <--> MTV	.358
REG<--> MTV	-.128
BS <--> MTV	.197
PS <--> MTV	.050
CC <--> MTV	.208
KC <--> MTV	.494
IA <--> MTV	.460
RM <--> MTV	.386
REG<--> FC	.095
FC <--> BS	.406
FC <--> PS	.248
FC <--> CC	.274
KC <--> FC	.260
IA <--> FC	.329
RM <--> FC	.175
REG<--> BS	.104
REG<--> PS	.252
REG<--> CC	-.140
KC <--> REG	.035
IA <--> REG	-.209
RM <--> REG	-.298
BS <--> PS	.178
BS <--> CC	.222
KC <--> BS	.175
IA <--> BS	.116
RM <--> BS	.027
CC <--> PS	.332
KC <--> PS	.175
IA <--> PS	.052
RM <--> PS	.090
KC <--> CC	.094
IA <--> CC	.310
RM <--> CC	.267
IA <--> KC	.389
RM <--> KC	.395
RM <--> IA	.726

Variiances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
RM	1.509	.138	10.899	***	par_64
IA	1.535	.110	13.919	***	par_65
KC	1.972	.158	12.499	***	par_66
REG	1.727	.125	13.803	***	par_67
FC	1.812	.133	13.674	***	par_68
BS	2.485	.193	12.861	***	par_69
CC	.888	.164	5.406	***	par_70
PS	.881	.120	7.371	***	par_71
MTV	1.347	.163	8.251	***	par_72
erm1	1.546	.090	17.236	***	par_73
eia4	1.616	.088	18.322	***	par_74
ekc1	1.246	.085	14.699	***	par_75
erm4	1.189	.079	15.081	***	par_76
eia1	.694	.049	14.222	***	par_77
eia2	1.363	.081	16.791	***	par_78
eia3	.812	.053	15.349	***	par_79
eia7	1.462	.082	17.935	***	par_80
ekc2	1.112	.076	14.586	***	par_81
ekc3	1.535	.092	16.684	***	par_82
ekc4	1.447	.080	17.996	***	par_83
ekc5	2.184	.127	17.217	***	par_84
ecc1	2.705	.177	15.312	***	par_85
ecc2	1.864	.176	10.596	***	par_86
eps1	1.958	.115	16.960	***	par_87
eps2	1.601	.104	15.455	***	par_88
eps3	1.527	.100	15.331	***	par_89
eps4	1.618	.098	16.460	***	par_90
eps5	1.908	.110	17.293	***	par_91
ebs1	.799	.119	6.719	***	par_92
ebs2	1.079	.123	8.740	***	par_93
ebs4	2.646	.139	19.029	***	par_94
ereg1	.830	.055	15.030	***	par_95
ereg2	.713	.048	14.862	***	par_96
ereg3	.690	.049	13.949	***	par_97
ereg4	1.415	.076	18.523	***	par_98
ereg6	1.602	.083	19.351	***	par_99
ereg7	1.904	.101	18.870	***	par_100
efc1	.685	.068	10.062	***	par_101
efc2	.759	.071	10.746	***	par_102
efc3	1.606	.090	17.751	***	par_103
emtv1	1.912	.136	14.026	***	par_104
emtv2	.993	.172	5.767	***	par_105
ecc3	2.186	.162	13.530	***	par_106
erm2	.786	.062	12.717	***	par_107

	Estimate	S.E.	C.R.	P	Label
erm3	1.483	.084	17.600	***	par_108

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

	Estimate
PS_64_54	.402
MTV_45_65	.413
REG_65_30	.675
BS_32_57	.757
CC_62_39	.393
BS_26_56	.695
PS_37_49	.310
PS_31_48	.287
PS_60_53	.402
CC_58_38	.279
MTV_33_63	.695
REG_57_28	.685
REG_34_24	.364
PS_66_55	.342
CC_53_37	.247
REG_38_25	.266
RECODE_BS_44_59	.251
KC_20_20	.613
FC_24_40	.417
FC_36_42	.706
FC_29_41	.726
REG_63_31	.408
REG_61_29	.723
RM_7_2	.702
IM_3_8	.449
KC_21_16	.457
KC_8_17	.383
IM_9_9	.417
RM_5_5	.609
KC_4_21	.498
KC_18_19	.610
RM_14_4	.647
IM_11_6	.563
IM_12_10	.689
RM_19_3	.458
RM_1_1	.494

Model Fit Summary**CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	108	1293.706	558	.000	2.318
Saturated model	666	.000	0		
Independence model	36	12038.029	630	.000	19.108

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.132	.916	.900	.767
Saturated model	.000	1.000		
Independence model	.585	.385	.350	.364

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.893	.879	.936	.927	.936
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.886	.791	.829
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	735.706	634.730	844.379
Saturated model	.000	.000	.000
Independence model	11408.029	11055.048	11767.404

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1.580	.898	.775	1.031
Saturated model	.000	.000	.000	.000
Independence model	14.698	13.929	13.498	14.368

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.040	.037	.043	1.000
Independence model	.149	.146	.151	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	1509.706	1519.926	2018.311	2126.311
Saturated model	1332.000	1395.023	4468.397	5134.397
Independence model	12110.029	12113.436	12279.564	12315.564

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.843	1.720	1.976	1.856
Saturated model	1.626	1.626	1.626	1.703
Independence model	14.786	14.355	15.225	14.791

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	389	405
Independence model	47	49

Execution time summary

Minimization: .094
 Miscellaneous: .624
 Bootstrap: .000
 Total: .718