

TI
 DA NI=52 NO=320 NG=1 MA=CM
 SE
 1 2 3 4 5 6 7 8 9 10 11 12 /
 MO NX=12 NK=3 LX=FU,FI PH=SY,FR TD=SY,FI
 LK
 DET1 DET2 DET3
 FR LX(1,1) LX(2,1) LX(3,1) LX(4,1) LX(5,2) LX(6,2) LX(7,2) LX(8,2) LX(9,3)
 FR LX(10,3) LX(11,3) LX(12,3)
 FR TD 1 1 TD 2 2 TD 3 3 TD 4 4 TD 5 5 TD 6 6 TD 7 7 TD 8 8 TD 9 9 TD 10 10
 FR TD 11 11 TD 12 12 TD 8 7 TD 4 3 TD 6 4 TD 12 1 TD 9 8 TD 9 7 TD 6 5 TD 5 4
 FR TD 6 3 TD 5 3 TD 12 7 TD 12 10 TD 2 1 TD 7 2 TD 12 11 TD 11 10
 PD
 OU ME=ML AM RS EF FS SS SC IT=250

LISREL Estimates (Maximum Likelihood)

LAMBDA-X			
	DET1	DET2	DET3
D1	0.61 (0.04) 16.22	--	--
D2	0.62 (0.04) 16.29	--	--
D3	0.58 (0.04) 14.59	--	--
D4	0.65	--	--

(0.04)

17.01

D5 -- 0.66 --

(0.04)

16.49

D6 -- 0.68 --

(0.04)

17.51

D7 -- 0.62 --

(0.04)

14.59

D8 -- 0.62 --

(0.04)

14.49

D9 -- -- 0.57

(0.04)

14.30

D10 -- -- 0.61

(0.04)

15.44

D11 -- -- 0.64

(0.04)

16.82

D12 -- -- 0.65

(0.04)

17.22

PHI

	DET1	DET2	DET3
DET1	1.00		
DET2	0.96 (0.02) 57.34	1.00	
DET3	0.94 (0.02) 41.60	0.98 (0.02) 46.21	1.00

THETA-DELTA

	D1	D2	D3	D4	D5	D6
D1	0.21 (0.02) 9.17					
D2	-0.03 (0.02) -1.91	0.21 (0.02) 9.17				
D3	--	--	0.29 (0.03) 10.68			
D4	--	--	0.12 (0.02)	0.21 (0.02)		

			5.88	9.59		
D5	--	--	0.06	0.08	0.24	
			(0.02)	(0.02)	(0.03)	
			3.29	4.64	9.43	
D6	--	--	0.08	0.12	0.09	0.20
			(0.02)	(0.02)	(0.02)	(0.02)
			4.34	6.41	4.64	8.71
D7	--	0.03	--	--	--	--
		(0.01)				
		2.13				
D8	--	--	--	--	--	--
D9	--	--	--	--	--	--
D10	--	--	--	--	--	--
D11	--	--	--	--	--	--
D12	0.03	--	--	--	--	--
	(0.01)					
	2.65					

THETA-DELTA

	D7	D8	D9	D10	D11	D12
D7	0.33					
	(0.03)					
	11.02					

D8 0.21 0.35
 (0.03) (0.03)
 8.03 11.02

D9 0.09 0.12 0.30
 (0.02) (0.02) (0.03)
 4.30 5.27 11.00

D10 -- -- -- 0.24
 (0.03)
 9.21

D11 -- -- -- 0.07 0.19
 (0.02) (0.02)
 3.38 8.14

D12 -0.03 -- -- 0.09 0.08 0.18
 (0.01) (0.02) (0.02) (0.02)
 -3.22 4.55 3.89 7.80

Squared Multiple Correlations for X – Variables

D1	D2	D3	D4	D5	D6
-----	-----	-----	-----	-----	-----
0.64	0.64	0.54	0.66	0.64	0.70

Squared Multiple Correlations for X – Variables

D7	D8	D9	D10	D11	D12
-----	-----	-----	-----	-----	-----
0.54	0.53	0.52	0.61	0.68	0.70

Goodness of Fit Statistics

Degrees of Freedom = 35

Minimum Fit Function Chi-Square = 31.38 (P = 0.64)

Normal Theory Weighted Least Squares Chi-Square = 30.49 (P = 0.69)

Estimated Non-centrality Parameter (NCP) = 0.0

90 Percent Confidence Interval for NCP = (0.0 ; 11.84)

Minimum Fit Function Value = 0.098

Population Discrepancy Function Value (FO) = 0.0

90 Percent Confidence Interval for FO = (0.0 ; 0.037)

Root Mean Square Error of Approximation (RMSEA) = 0.0

90 Percent Confidence Interval for RMSEA = (0.0 ; 0.033)

P-Value for Test of Close Fit (RMSEA < 0.05) = 1.00

Expected Cross-Validation Index (ECVI) = 0.38

90 Percent Confidence Interval for ECVI = (0.38 ; 0.42)

ECVI for Saturated Model = 0.49

ECVI for Independence Model = 26.17

Chi-Square for Independence Model with 66 Degrees of Freedom = 8325.40

Independence AIC = 8349.40

Model AIC = 116.49

Saturated AIC = 156.00

Independence CAIC = 8406.62

Model CAIC = 321.53

Saturated CAIC = 527.93

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.53

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 583.96

Root Mean Square Residual (RMR) = 0.0098

Standardized RMR = 0.016

Goodness of Fit Index (GFI) = 0.98

Adjusted Goodness of Fit Index (AGFI) = 0.97

Parsimony Goodness of Fit Index (PGFI) = 0.44

TI

Factor Scores Regressions

KSI

	D1	D2	D3	D4	D5	D6
DET1	0.32	0.32	0.09	0.20	0.07	0.03
DET2	0.20	0.20	0.04	-0.01	0.16	0.23
DET3	0.16	0.18	0.03	0.00	0.13	0.18

KSI

	D7	D8	D9	D10	D11	D12
DET1	0.03	0.07	0.07	0.08	0.14	0.06
DET2	0.09	0.08	0.08	0.09	0.16	0.14
DET3	0.08	0.04	0.14	0.11	0.21	0.19

PHI

	DET1	DET2	DET3
DET1	1.00		
DET2	0.96	1.00	
DET3	0.94	0.98	1.00

Time used: 0.125 Seconds

TI

DA NI=56 NO=320 NG=1 MA=CM

SE

17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 /

MO NX=15 NK=3 LX=FU,FI PH=SY,FR TD=SY,FI

LK

COU1 COU2 COU3

FR LX(1,1) LX(2,1) LX(3,1) LX(4,1) LX(5,1) LX(6,2) LX(7,2) LX(8,2) LX(9,2)

FR LX(10,2) LX(11,3) LX(12,3) LX(13,3) LX(14,3) LX(15,3)

FR TD 1 1 TD 2 2 TD 3 3 TD 4 4 TD 5 5 TD 6 6 TD 7 7 TD 8 8 TD 9 9 TD 10 10

FR TD 11 11 TD 12 12 TD 13 13 TD 14 14 TD 15 15 TD 15 14 TD 8 7 TD 6 5 TD 6 4

FR TD 11 10 TD 6 3 TD 6 1 TD 6 2 TD 5 2 TD 10 8 TD 3 2 TD 3 1 TD 14 9 TD 11 9

FR TD 13 11 TD 13 12 TD 12 11 TD 14 10 TD 15 10 TD 13 1 TD 13 10 TD 10 6 TD 12 7

FR TD 13 8 TD 12 2 TD 12 8 TD 15 1 TD 5 3 TD 5 1 TD 13 9 TD 12 9 TD 10 7 TD 15 9

FR TD 12 10

PD

OU ME=ML AM RS EF FS SS SC IT=250 MI AD = OFF

TI

Number of Iterations = 58

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

	COU1	COU2	COU3
	-----	-----	-----
C13	0.65	--	--
	(0.03)		
	19.16		
C14	0.71	--	--
	(0.04)		
	17.26		
C15	0.70	--	--
	(0.04)		
	18.78		
C16	0.68	--	--
	(0.03)		
	19.78		
C17	0.71	--	--
	(0.04)		
	19.83		
C18	--	0.58	--
		(0.04)	
		15.97	
C19	--	0.61	--
		(0.04)	
		16.57	
C20	--	0.65	--
		(0.04)	

			17.68
C21	--	0.55	--
		(0.04)	
		14.05	
C22	--	0.64	--
		(0.04)	
		15.71	
C23	--	--	0.62
		(0.04)	
		15.62	
C24	--	--	0.64
		(0.04)	
		15.18	
C25	--	--	0.67
		(0.04)	
		16.58	
C26	--	--	0.62
		(0.04)	
		14.38	
C27	--	--	0.63
		(0.04)	
		14.44	

PHI

	COU1	COU2	COU3
COU1	1.00		
COU2	0.80 (0.03) 31.37	1.00	
COU3	0.82 (0.03) 28.90	0.94 (0.03) 37.65	1.00

THETA-DELTA

	C13	C14	C15	C16	C17	C18
C13	0.13 (0.02) 8.52					
C14	--	0.25 (0.02) 10.11				
C15	0.01 (0.01) 0.93	0.06 (0.02) 3.34	0.16 (0.02) 8.00			
C16	--	--	--	0.13 (0.01) 9.29		
C17	-0.04 (0.01)	-0.08 (0.02)	-0.05 (0.01)	--	0.11 (0.02)	

	-2.80	-5.18	-3.41		6.18	
C18	0.09	0.08	0.11	0.16	0.17	0.22
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
	5.21	3.99	6.02	8.44	9.17	10.45
C19	--	--	--	--	--	--
C20	--	--	--	--	--	--
C21	--	--	--	--	--	--
C22	--	--	--	--	--	-0.04
					(0.01)	
					-3.86	
C23	--	--	--	--	--	--
C24	--	0.03	--	--	--	--
		(0.01)				
		2.24				
C25	0.02	--	--	--	--	--
	(0.01)					
	2.62					
C26	--	--	--	--	--	--
C27	0.02	--	--	--	--	--
	(0.01)					
	1.89					

THETA-DELTA

	C19	C20	C21	C22	C23	C24
C19	0.18 (0.02) 8.28					
C20	0.07 (0.02) 3.55	0.16 (0.02) 7.22				
C21	--	--	0.30 (0.03) 11.29			
C22	-0.04 (0.02) -2.33	-0.08 (0.02) -4.66	--	0.21 (0.03) 7.10		
C23	--	--	0.09 (0.02) 5.09	0.11 (0.02) 5.33	0.24 (0.03) 9.14	
C24	0.03 (0.01) 1.88	-0.02 (0.01) -1.10	0.07 (0.02) 3.77	0.04 (0.02) 1.94	0.09 (0.02) 4.01	0.27 (0.03) 8.81
C25	--	-0.02 (0.01) -2.28	0.07 (0.02) 3.84	0.05 (0.02) 2.74	0.12 (0.02) 5.31	0.11 (0.02) 4.87
C26	--	--	0.08	-0.05	--	--

(0.02) (0.02)
 3.73 -2.32

C27 -- -- 0.05 -0.05 -- --
 (0.02) (0.02)
 2.18 -2.51

THETA-DELTA

	C25	C26	C27
C25	0.22 (0.03) 8.20		
C26	-- 0.33 (0.03) 10.61		
C27	-- 0.21 (0.03) 7.64	0.34 (0.03) 10.63	

Squared Multiple Correlations for X – Variables

C13	C14	C15	C16	C17	C18
0.76	0.67	0.75	0.78	0.81	0.60

Squared Multiple Correlations for X – Variables

C19	C20	C21	C22	C23	C24

0.67 0.73 0.50 0.66 0.62 0.61
 Squared Multiple Correlations for X – Variables

C25	C26	C27
-----	-----	-----
0.67	0.53	0.53

Goodness of Fit Statistics

Degrees of Freedom = 53

Minimum Fit Function Chi-Square = 54.06 (P = 0.43)

Normal Theory Weighted Least Squares Chi-Square = 52.05 (P = 0.51)

Estimated Non-centrality Parameter (NCP) = 0.0

90 Percent Confidence Interval for NCP = (0.0 ; 20.02)

Minimum Fit Function Value = 0.17

Population Discrepancy Function Value (FO) = 0.0

90 Percent Confidence Interval for FO = (0.0 ; 0.063)

Root Mean Square Error of Approximation (RMSEA) = 0.0

90 Percent Confidence Interval for RMSEA = (0.0 ; 0.034)

P-Value for Test of Close Fit (RMSEA < 0.05) = 1.00

Expected Cross-Validation Index (ECVI) = 0.59

90 Percent Confidence Interval for ECVI = (0.59 ; 0.65)

ECVI for Saturated Model = 0.75

ECVI for Independence Model = 39.60

Chi-Square for Independence Model with 105 Degrees of Freedom = 12601.85

Independence AIC = 12631.85

Model AIC = 186.05

Saturated AIC = 240.00

Independence CAIC = 12703.37

Model CAIC = 505.53

Saturated CAIC = 812.20

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.50

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 472.12

Root Mean Square Residual (RMR) = 0.016

Standardized RMR = 0.025

Goodness of Fit Index (GFI) = 0.98

Adjusted Goodness of Fit Index (AGFI) = 0.95

Parsimony Goodness of Fit Index (PGFI) = 0.43

TI

Factor Scores Regressions

KSI

	C13	C14	C15	C16	C17	C18
COU1	0.17	0.13	0.38	0.71	1.24	-1.63
COU2	0.02	0.04	0.00	-0.09	-0.09	0.34
COU3	0.01	0.03	0.06	0.05	0.11	0.00

KSI

	C19	C20	C21	C22	C23	C24
COU1	0.14	0.17	0.13	-0.05	0.00	-0.03

COU2	0.11	0.46	0.08	0.55	-0.25	0.04
COU3	0.06	0.33	-0.07	0.27	-0.01	0.13

KSI

	C25	C26	C27
COU1	0.01	-0.02	-0.01
COU2	0.13	0.07	0.11
COU3	0.21	0.14	0.14

PHI

	COU1	COU2	COU3
COU1	1.00		
COU2	0.80	1.00	
COU3	0.82	0.94	1.00

Time used: 0.156 Seconds

TI

DA NI=52 NO=320 NG=1 MA=CM

SE

28 29 30 31 32 33 34 35 36 37 38 39 40 /

MO NX=13 NK=3 LX=FU,FI PH=SY,FR TD=SY,FI

LK

STD1 STD2 STD3

FR LX(1,1) LX(2,1) LX(3,1) LX(4,1) LX(5,2) LX(6,2) LX(7,2) LX(8,2) LX(9,2)

FR LX(10,3) LX(11,3) LX(12,3) LX(13,3)

FR TD 1 1 TD 2 2 TD 3 3 TD 4 4 TD 5 5 TD 6 6 TD 7 7 TD 8 8 TD 9 9 TD 10 10

FR TD 11 11 TD 12 12 TD 13 13 TD 10 9 TD 13 12 TD 9 8 TD 13 4 TD 6 5 TD 8 5

FR TD 6 4 TD 11 3 TD 5 4 TD 7 4 TD 8 4 TD 9 4 TD 12 4 TD 10 4 TD 10 6 TD 11 4

FR TD 11 10 TD 13 7 TD 6 3 TD 9 5

PD

OU ME=ML AM RS EF FS SS SC IT=250

TI

Number of Iterations = 9

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

	STD1	STD2	STD3
	-----	-----	-----
S28	0.64	--	--
	(0.03)		
	19.03		
S29	0.68	--	--
	(0.03)		
	20.43		
S30	0.67	--	--
	(0.03)		
	21.28		
S31	0.43	--	--
	(0.04)		
	10.73		
S32	--	0.52	--
		(0.04)	
		13.35	
S33	--	0.57	--

			(0.04)	
			14.67	
S34	--	0.62	--	
		(0.04)		
		15.57		
S35	--	0.56	--	
		(0.04)		
		13.49		
S36	--	0.61	--	
		(0.04)		
		15.62		
S37	--	--	0.52	
		(0.04)		
		13.44		
S38	--	--	0.65	
		(0.06)		
		10.34		
S39	--	--	0.55	
		(0.04)		
		13.99		
S40	--	--	0.60	
		(0.05)		
		13.15		

PHI

	STD1	STD2	STD3
STD1	1.00		
STD2	0.78 (0.03) 25.76	1.00	
STD3	0.75 (0.04) 20.07	0.94 (0.03) 35.84	1.00

THETA-DELTA

	S28	S29	S30	S31	S32	S33
S28	0.14 (0.01) 9.94					
S29	--	0.11 (0.01) 8.44				
S30	--	--	0.08 (0.01) 7.03			
S31	--	--	--	0.39 (0.03) 12.31		

S32	--	--	--	0.14	0.28		
				(0.02)	(0.03)		
				6.07	10.71		
S33	--	--	0.01	0.14	0.09	0.26	
			(0.01)	(0.02)	(0.02)	(0.03)	
			0.79	6.28	4.67	10.45	
S34	--	--	--	0.13	--	--	
				(0.02)			
				5.58			
S35	--	--	--	0.15	0.08	--	
				(0.02)	(0.02)		
				6.09	3.81		
S36	--	--	--	0.12	0.03	--	
				(0.02)	(0.02)		
				5.21	1.74		
S37	--	--	--	0.09	--	0.03	
				(0.02)	(0.02)		
				4.18	1.87		
S38	--	--	-0.06	0.08	--	--	
			(0.02)	(0.03)			
			-3.12	2.42			
S39	--	--	--	0.10	--	--	
				(0.02)			
				4.42			
S40	--	--	--	0.18	--	--	

(0.03)

6.86

THETA-DELTA

	S34	S35	S36	S37	S38	S39
S34	0.26 (0.03) 10.01					
S35	--	0.33 (0.03) 10.71				
S36	--	0.09 (0.02) 4.18	0.25 (0.03) 9.85			
S37	--	--	0.08 (0.02) 4.52	0.27 (0.03) 9.91		
S38	--	--	--	-0.07 (0.03) -2.26	0.84 (0.07) 11.28	
S39	--	--	--	--	--	0.26 (0.03) 9.87
S40	0.04 (0.02)	--	--	--	--	0.11 (0.02)

1.89

4.60

THETA-DELTA

S40

 S40 0.37
 (0.04)
 10.17

Squared Multiple Correlations for X – Variables

S28	S29	S30	S31	S32	S33
-----	-----	-----	-----	-----	-----
0.74	0.81	0.85	0.32	0.49	0.55

Squared Multiple Correlations for X – Variables

S34	S35	S36	S37	S38	S39
-----	-----	-----	-----	-----	-----
0.60	0.49	0.60	0.51	0.33	0.53

Squared Multiple Correlations for X – Variables

S40

 0.49

Goodness of Fit Statistics

Degrees of Freedom = 42

Minimum Fit Function Chi-Square = 42.07 (P = 0.47)

Normal Theory Weighted Least Squares Chi-Square = 41.87 (P = 0.48)

Estimated Non-centrality Parameter (NCP) = 0.0
90 Percent Confidence Interval for NCP = (0.0 ; 19.23)

Minimum Fit Function Value = 0.13
Population Discrepancy Function Value (F0) = 0.0
90 Percent Confidence Interval for F0 = (0.0 ; 0.060)
Root Mean Square Error of Approximation (RMSEA) = 0.0
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.038)
P-Value for Test of Close Fit (RMSEA < 0.05) = 1.00
Expected Cross-Validation Index (ECVI) = 0.44
90 Percent Confidence Interval for ECVI = (0.44 ; 0.50)
ECVI for Saturated Model = 0.57
ECVI for Independence Model = 21.43

Chi-Square for Independence Model with 78 Degrees of Freedom = 6810.43

Independence AIC = 6836.43

Model AIC = 139.87

Saturated AIC = 182.00

Independence CAIC = 6898.42

Model CAIC = 373.52

Saturated CAIC = 615.92

Normed Fit Index (NFI) = 0.99

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.54

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 502.99

Root Mean Square Residual (RMR) = 0.013

Standardized RMR = 0.019

Goodness of Fit Index (GFI) = 0.98
 Adjusted Goodness of Fit Index (AGFI) = 0.96
 Parsimony Goodness of Fit Index (PGFI) = 0.45

TI

Factor Scores Regressions

KSI

	S28	S29	S30	S31	S32	S33
STD1	0.29	0.41	0.59	0.03	0.01	0.00
STD2	0.08	0.11	0.18	-0.57	0.16	0.30
STD3	0.05	0.08	0.19	-0.56	0.14	0.20

KSI

	S34	S35	S36	S37	S38	S39
STD1	0.03	0.01	0.02	0.02	0.05	0.01
STD2	0.33	0.21	0.22	0.10	0.07	0.11
STD3	0.23	0.19	0.08	0.29	0.13	0.21

KSI

S40

STD1	0.00
STD2	0.20
STD3	0.28

PHI

	STD1	STD2	STD3
STD1	1.00		
STD2	0.78	1.00	
STD3	0.75	0.94	1.00

Time used: 0.141 Seconds

TI

DA NI=56 NO=320 NG=1 MA=CM

SE

45 46 47 48 49 50 51 52 53 54 55 56 /

MO NX=12 NK=3 LX=FU,FI PH=SY,FR TD=SY,FI

LK

VIS1 VIS2 VIS3

FR LX(1,1) LX(2,1) LX(3,1) LX(4,2) LX(5,2) LX(6,2) LX(7,2) LX(8,2) LX(9,3)

FR LX(10,3) LX(11,3) LX(12,3)

FR TD 1 1 TD 2 2 TD 3 3 TD 4 4 TD 5 5 TD 6 6 TD 7 7 TD 8 8 TD 9 9 TD 10 10

FR TD 11 11 TD 12 12 TD 5 4 TD 6 5 TD 6 4 TD 9 4 TD 12 11 TD 12 4 TD 11 10

FR TD 12 2 TD 11 3 TD 7 6 TD 10 2 TD 3 1 TD 10 3 TD 10 1 TD 12 8

PD

OU ME=ML AM RS EF FS SS SC IT=250

TI

Number of Iterations = 26

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

VIS1 VIS2 VIS3

	-----	-----	-----
V41	0.68	--	--
	(0.04)		
	18.14		
V42	0.73	--	--
	(0.04)		
	19.42		
V43	0.75	--	--
	(0.04)		
	20.47		
V44	--	0.59	--
	(0.04)		
	14.02		
V45	--	0.58	--
	(0.04)		
	13.44		
V46	--	0.54	--
	(0.04)		
	13.59		
V47	--	0.67	--
	(0.04)		
	19.02		
V48	--	0.68	--
	(0.03)		
	19.77		
V49	--	--	0.73

(0.03)

22.56

V50 -- -- 0.70

(0.04)

18.29

V51 -- -- 0.77

(0.04)

20.83

V52 -- -- 0.66

(0.04)

17.36

PHI

 VIS1 VIS2 VIS3

VIS1 1.00

VIS2 0.84 1.00

(0.02)

35.44

VIS3 0.78 0.97 1.00

(0.03) (0.01)

29.20 86.67

THETA-DELTA

 V41 V42 V43 V44 V45 V46

V41	0.17					
	(0.02)					
	7.73					
V42	--	0.15				
		(0.02)				
		7.57				
V43	0.03	--	0.10			
	(0.02)		(0.02)			
	1.72		5.41			
V44	--	--	--	0.36		
				(0.03)		
				11.78		
V45	--	--	--	0.25	0.40	
				(0.03)	(0.03)	
				9.02	12.04	
V46	--	--	--	0.11	0.16	0.34
				(0.02)	(0.02)	(0.03)
				4.97	6.52	11.87
V47	--	--	--	--	--	-0.02
						(0.01)
						-1.77
V48	--	--	--	--	--	--
V49	--	--	--	-0.04	--	--
				(0.01)		
				-4.85		
V50	0.04	0.06	0.06	--	--	--

(0.02) (0.02) (0.02)
2.59 4.02 3.68

V51 -- -- -0.02 -- -- --
(0.01)
-2.13

V52 -- 0.03 -- -0.04 -- --
(0.01) (0.01)
2.48 -3.50

THETA-DELTA

	V47	V48	V49	V50	V51	V52
V47	0.16 (0.02) 10.47					
V48	-- 0.13 (0.01) 9.90					
V49	-- -- 0.06 (0.01) 6.86					
V50	-- -- -- 0.21 (0.02) 11.29					
V51	-- -- -- 0.03 0.13					

(0.01) (0.01)
 3.20 9.72

V52 -- -0.03 -- -- 0.03 0.23
 (0.01) (0.01) (0.02)
 -2.42 2.87 11.10

Squared Multiple Correlations for X – Variables

V41	V42	V43	V44	V45	V46
0.73	0.78	0.84	0.49	0.46	0.47

Squared Multiple Correlations for X – Variables

V47	V48	V49	V50	V51	V52
0.74	0.78	0.90	0.70	0.82	0.66

Goodness of Fit Statistics

Degrees of Freedom = 36
 Minimum Fit Function Chi-Square = 37.03 (P = 0.42)
 Normal Theory Weighted Least Squares Chi-Square = 35.66 (P = 0.48)
 Estimated Non-centrality Parameter (NCP) = 0.0
 90 Percent Confidence Interval for NCP = (0.0 ; 17.83)

Minimum Fit Function Value = 0.12
 Population Discrepancy Function Value (FO) = 0.0
 90 Percent Confidence Interval for FO = (0.0 ; 0.056)
 Root Mean Square Error of Approximation (RMSEA) = 0.0
 90 Percent Confidence Interval for RMSEA = (0.0 ; 0.039)
 P-Value for Test of Close Fit (RMSEA < 0.05) = 0.99

Expected Cross-Validation Index (ECVI) = 0.38

90 Percent Confidence Interval for ECVI = (0.38 ; 0.43)

ECVI for Saturated Model = 0.49

ECVI for Independence Model = 28.14

Chi-Square for Independence Model with 66 Degrees of Freedom = 8951.82

Independence AIC = 8975.82

Model AIC = 119.66

Saturated AIC = 156.00

Independence CAIC = 9033.04

Model CAIC = 319.93

Saturated CAIC = 527.93

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.54

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 505.94

Root Mean Square Residual (RMR) = 0.018

Standardized RMR = 0.026

Goodness of Fit Index (GFI) = 0.98

Adjusted Goodness of Fit Index (AGFI) = 0.96

Parsimony Goodness of Fit Index (PGFI) = 0.45

TI

Factor Scores Regressions

KSI

	V41	V42	V43	V44	V45	V46
VIS1	0.20	0.42	0.55	0.03	0.00	0.02
VIS2	0.04	0.04	0.11	0.15	-0.05	0.06
VIS3	0.00	-0.03	0.03	0.17	-0.08	0.03

KSI

	V47	V48	V49	V50	V51	V52
VIS1	0.06	0.06	0.12	-0.31	0.22	-0.05
VIS2	0.20	0.24	0.40	0.01	0.13	0.10
VIS3	0.11	0.15	0.59	0.10	0.17	0.14

Time used: 0.094 Seconds

TI

DA NI=12 NO=320 NG=1 MA=CM

SE

1 2 3 4 5 6 7 8 9 10 11 12 /

MO NY=12 NK=1 NE=4 LY=FU,FI BE=FU,FI GA=FU,FI PH=SY,FR PS=DI,FR TE=SY,FI

LE

DET COU STD VIS

LK

IL

FR LY(1,1) LY(2,1) LY(3,1) LY(4,2) LY(5,2) LY(6,2) LY(7,3) LY(8,3) LY(9,3)

FR LY(10,4) LY(11,4) LY(12,4) GA(1,1) GA(2,1) GA(3,1) GA(4,1)

FR TE 1 1 TE 2 2 TE 3 3 TE 4 4 TE 5 5 TE 6 6 TE 7 7 TE 8 8 TE 9 9 TE 10 10

FR TE 11 11 TE 12 12 TE 6 5 TE 7 6 TE 10 9 TE 12 9 TE 12 1 TE 7 5 TE 12 11

FR TE 10 5 TE 10 6 TE 12 2 TE 8 7 TE 2 1 TE 8 3 TE 10 8 TE 7 1 TE 9 4

PD

OU ME=ML AM RS EF FS SS SC IT=250 MI AD = OFF

TI

Number of Iterations = 20

LISREL Estimates (Maximum Likelihood)

LAMBDA-Y				
	DET	COU	STD	VIS
	-----	-----	-----	-----
DET1	0.53	--	--	--
DET2	0.55	--	--	--
	(0.02)			
	22.10			
DET3	0.57	--	--	--
	(0.03)			
	17.80			
COU1	--	0.56	--	--
COU2	--	0.43	--	--
	(0.03)			
	15.12			
COU3	--	0.42	--	--
	(0.03)			
	13.54			
STD1	--	--	0.50	--
STD2	--	--	0.58	--
		(0.03)		

			17.62	
STD3	--	--	0.58	--
			(0.03)	
			17.81	
VIS1	--	--	--	0.66
VIS2	--	--	--	0.59
			(0.03)	
			21.18	
VIS3	--	--	--	0.62
			(0.03)	
			19.44	
GAMMA				
		IL		

DET	0.95			
	(0.06)			
	16.73			
COU	1.01			
	(0.05)			
	19.68			
STD	1.01			
	(0.06)			
	16.18			
VIS	0.99			

(0.05)

19.20

Covariance Matrix of ETA and KSI

	DET	COU	STD	VIS	IL
DET	1.00				
COU	0.96	1.00			
STD	0.96	1.02	1.00		
VIS	0.94	1.00	1.00	1.00	
IL	0.95	1.01	1.01	0.99	1.00

PHI

IL

1.00

PSI

Note: This matrix is diagonal.

	DET	COU	STD	VIS
	0.09	-0.02	-0.02	0.02
	(0.03)	(0.03)	(0.02)	(0.02)
	3.40	-0.53	-0.76	1.08

Squared Multiple Correlations for Structural Equations

DET	COU	STD	VIS
-----	-----	-----	-----

 0.91 1.02 1.02 0.98

Squared Multiple Correlations for Reduced Form

DET COU STD VIS

0.91 1.02 1.02 0.98

THETA-EPS

DET1 DET2 DET3 COU1 COU2 COU3

DET1 0.13
 (0.01)
 9.80

DET2 0.03 0.10
 (0.01) (0.01)
 3.23 8.94

DET3 -- -- 0.13
 (0.01)
 10.04

COU1 -- -- -- 0.10
 (0.01)
 8.03

COU2 -- -- -- -- 0.18
 (0.02)
 11.77

COU3 -- -- -- -- 0.11 0.24

				(0.01)	(0.02)	
				7.95	12.03	
STD1	0.02	--	--	--	0.04	0.08
	(0.01)			(0.01)	(0.01)	
	2.30			3.93	6.61	
STD2	--	--	-0.03	--	--	--
		(0.01)				
		-3.12				
STD3	--	--	--	-0.01	--	--
			(0.01)			
			-2.33			
VIS1	--	--	--	--	-0.05	-0.03
				(0.01)	(0.01)	
				-5.12	-3.00	
VIS2	--	--	--	--	--	--
VIS3	0.05	0.03	--	--	--	--
	(0.01)	(0.01)				
	5.83	4.07				

THETA-EPS

	STD1	STD2	STD3	VIS1	VIS2	VIS3
STD1	0.18					
	(0.01)					
	11.71					

STD2 0.04 0.18
 (0.01) (0.02)
 3.50 11.14

STD3 -- -- 0.08
 (0.01)
 8.63

VIS1 -- -0.03 0.02 0.13
 (0.01) (0.01) (0.01)
 -2.56 2.30 9.14

VIS2 -- -- -- -- 0.12
 (0.01)
 9.94

VIS3 -- -- 0.03 -- 0.05 0.18
 (0.01) (0.01) (0.02)
 4.70 4.75 10.99

Squared Multiple Correlations for Y – Variables

DET1	DET2	DET3	COU1	COU2	COU3
0.68	0.74	0.71	0.76	0.50	0.43

Squared Multiple Correlations for Y – Variables

STD1	STD2	STD3	VIS1	VIS2	VIS3
0.59	0.65	0.80	0.77	0.74	0.68

Goodness of Fit Statistics

Degrees of Freedom = 34

Minimum Fit Function Chi-Square = 33.57 (P = 0.49)

Normal Theory Weighted Least Squares Chi-Square = 33.46 (P = 0.49)

Estimated Non-centrality Parameter (NCP) = 0.0

90 Percent Confidence Interval for NCP = (0.0 ; 17.17)

Minimum Fit Function Value = 0.11

Population Discrepancy Function Value (FO) = 0.0

90 Percent Confidence Interval for FO = (0.0 ; 0.054)

Root Mean Square Error of Approximation (RMSEA) = 0.0

90 Percent Confidence Interval for RMSEA = (0.0 ; 0.040)

P-Value for Test of Close Fit (RMSEA < 0.05) = 0.99

Expected Cross-Validation Index (ECVI) = 0.38

90 Percent Confidence Interval for ECVI = (0.38 ; 0.44)

ECVI for Saturated Model = 0.49

ECVI for Independence Model = 29.91

Chi-Square for Independence Model with 66 Degrees of Freedom = 9518.13

Independence AIC = 9542.13

Model AIC = 121.46

Saturated AIC = 156.00

Independence CAIC = 9599.35

Model CAIC = 331.27

Saturated CAIC = 527.93

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.51

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 533.75

Root Mean Square Residual (RMR) = 0.0057

Standardized RMR = 0.013

Goodness of Fit Index (GFI) = 0.98

Adjusted Goodness of Fit Index (AGFI) = 0.96

Parsimony Goodness of Fit Index (PGFI) = 0.43

TI

Factor Scores Regressions

ETA

	DET1	DET2	DET3	COU1	COU2	COU3
DET	0.26	0.33	0.33	0.17	0.08	0.03
COU	0.08	0.12	0.15	0.22	0.11	0.00
STD	0.08	0.11	0.15	0.32	0.16	0.05
VIS	0.04	0.08	0.13	0.25	0.15	0.03

ETA

	STD1	STD2	STD3	VIS1	VIS2	VIS3
DET	-0.02	0.16	0.24	0.13	0.17	-0.16
COU	0.06	0.21	0.35	0.23	0.20	-0.03
STD	-0.01	0.18	0.23	0.27	0.19	-0.01
VIS	0.02	0.19	0.22	0.31	0.22	0.04

TI

Standardized Solution

LAMBDA-Y

	DET	COU	STD	VIS
DET1	0.53	--	--	--
DET2	0.55	--	--	--
DET3	0.57	--	--	--
COU1	--	0.56	--	--
COU2	--	0.43	--	--
COU3	--	0.42	--	--
STD1	--	--	0.50	--
STD2	--	--	0.58	--
STD3	--	--	0.58	--
VIS1	--	--	--	0.66
VIS2	--	--	--	0.59
VIS3	--	--	--	0.62

GAMMA

IL

DET	0.95
COU	1.01
STD	1.01
VIS	0.99

Correlation Matrix of ETA and KSI

	DET	COU	STD	VIS	IL
DET	1.00				
COU	0.96	1.00			
STD	0.96	1.02	1.00		
VIS	0.94	1.00	1.00	1.00	

IL 0.95 1.01 1.01 0.99 1.00

PSI

Note: This matrix is diagonal.

	DET	COU	STD	VIS

	0.09	-0.02	-0.02	0.02

TI

Completely Standardized Solution

LAMBDA-Y

	DET	COU	STD	VIS

DET1	0.83	--	--	--
DET2	0.86	--	--	--
DET3	0.84	--	--	--
COU1	--	0.87	--	--
COU2	--	0.71	--	--
COU3	--	0.65	--	--
STD1	--	--	0.77	--
STD2	--	--	0.81	--
STD3	--	--	0.90	--
VIS1	--	--	--	0.88
VIS2	--	--	--	0.86
VIS3	--	--	--	0.83

GAMMA

IL

DET	0.95

COU 1.01
 STD 1.01
 VIS 0.99

Correlation Matrix of ETA and KSI

	DET	COU	STD	VIS	IL
DET	1.00				
COU	0.96	1.00			
STD	0.96	1.02	1.00		
VIS	0.94	1.00	1.00	1.00	
IL	0.95	1.01	1.01	0.99	1.00

PSI

Note: This matrix is diagonal.

	DET	COU	STD	VIS
	0.09	-0.02	-0.02	0.02

THETA-EPS

	DET1	DET2	DET3	COU1	COU2	COU3
DET1	0.32					
DET2	0.08	0.26				
DET3	--	--	0.29			
COU1	--	--	--	0.24		
COU2	--	--	--	--	0.50	
COU3	--	--	--	--	0.29	0.57
STD1	0.04	--	--	--	0.11	0.20
STD2	--	--	-0.06	--	--	--

STD3	--	--	--	-0.03	--	--
VIS1	--	--	--	--	-0.11	-0.06
VIS2	--	--	--	--	--	--
VIS3	0.11	0.07	--	--	--	--

THETA-EPS

	STD1	STD2	STD3	VIS1	VIS2	VIS3
STD1	0.41					
STD2	0.08	0.35				
STD3	--	--	0.20			
VIS1	--	-0.05	0.04	0.23		
VIS2	--	--	--	--	0.26	
VIS3	--	--	0.07	--	0.10	0.32

TI

Total and Indirect Effects

Total Effects of X on ETA

	IL
DET	0.95 (0.06) 16.73
COU	1.01 (0.05) 19.68
STD	1.01 (0.06)

16.18

VIS 0.99
(0.05)
19.20

BETA*BETA' is not Pos. Def., Stability Index cannot be Computed

Total Effects of ETA on Y

	DET	COU	STD	VIS
	-----	-----	-----	-----
DET1	0.53	--	--	--
DET2	0.55	--	--	--
	(0.02)			
	22.10			
DET3	0.57	--	--	--
	(0.03)			
	17.80			
COU1	--	0.56	--	--
COU2	--	0.43	--	--
	(0.03)			
	15.12			
COU3	--	0.42	--	--
	(0.03)			
	13.54			

STD1	--	--	0.50	--
STD2	--	--	0.58	--
			(0.03)	
			17.62	
STD3	--	--	0.58	--
			(0.03)	
			17.81	
VIS1	--	--	--	0.66
VIS2	--	--	--	0.59
			(0.03)	
			21.18	
VIS3	--	--	--	0.62
			(0.03)	
			19.44	
Total Effects of X on Y				
	IL			

DET1	0.51			
	(0.03)			
	16.73			
DET2	0.52			
	(0.03)			
	17.80			
DET3	0.54			

(0.03)

17.07

COU1 0.56

(0.03)

19.68

COU2 0.43

(0.03)

14.37

COU3 0.43

(0.03)

12.99

STD1 0.51

(0.03)

16.18

STD2 0.58

(0.03)

17.40

STD3 0.59

(0.03)

20.51

VIS1 0.66

(0.03)

19.20

VIS2 0.59

(0.03)

มหาวิทยาลัยราชภัฏสุราษฎร์ธานี

18.86

VIS3 0.61

(0.03)

17.56

TI

Standardized Total and Indirect Effects

Standardized Total Effects of X on ETA

	IL
DET	0.95
COU	1.01
STD	1.01
VIS	0.99

Standardized Total Effects of ETA on Y

	DET	COU	STD	VIS
DET1	0.53	--	--	--
DET2	0.55	--	--	--
DET3	0.57	--	--	--
COU1	--	0.56	--	--
COU2	--	0.43	--	--
COU3	--	0.42	--	--
STD1	--	--	0.50	--
STD2	--	--	0.58	--
STD3	--	--	0.58	--
VIS1	--	--	--	0.66
VIS2	--	--	--	0.59

VIS3 -- -- -- 0.62

Completely Standardized Total Effects of ETA on Y

	DET	COU	STD	VIS
	-----	-----	-----	-----
DET1	0.83	--	--	--
DET2	0.86	--	--	--
DET3	0.84	--	--	--
COU1	--	0.87	--	--
COU2	--	0.71	--	--
COU3	--	0.65	--	--
STD1	--	--	0.77	--
STD2	--	--	0.81	--
STD3	--	--	0.90	--
VIS1	--	--	--	0.88
VIS2	--	--	--	0.86
VIS3	--	--	--	0.83

Standardized Total Effects of X on Y

	IL

DET1	0.51
DET2	0.52
DET3	0.54
COU1	0.56
COU2	0.43
COU3	0.43
STD1	0.51
STD2	0.58
STD3	0.59
VIS1	0.66

VIS2 0.59

VIS3 0.61

Completely Standardized Total Effects of X on Y

IL

DET1 0.79

DET2 0.82

DET3 0.80

COU1 0.88

COU2 0.71

COU3 0.66

STD1 0.77

STD2 0.81

STD3 0.90

VIS1 0.87

VIS2 0.85

VIS3 0.82

Time used: 0.125 Seconds

มหาวิทยาลัยราชภัฏสุราษฎร์ธานี

ภาคผนวก จ

ผลการวิเคราะห์ข้อมูลด้วยโปรแกรม Lisrel

มหาวิทยาลัยราชภัฏสุราษฎร์ธานี