ภาคผนวก จ

ผลการวิเคราะห์โมเดลความสัมพันธ์เชิงสาเหตุปัจจัยที่ส่งผลต่อการบริหารจัดการศึกษา โดยใช้โปรแกรมลิสเรล

DATE: 4/ 3/2019

TIME: 23:33

L I S R E L 8.52

BY

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The following lines were read from file C:\Users\Desktop\Aor\path.LPJ:

```
TI path
!DA NI=23 NO=440 NG=1 MA=CM
SY='C:\Users\Desktop\Aor\path.DSF' NG=1
SE
2 3 4 5 6 15 16 17 18 19 20 21 22 23 7 8 9 10 11 12 13 14 /
MO NX=8 NY=14 NK=2 NE=3 LY=FU,FI LX=FU,FI BE=FU,FI GA=FU,FI PH=SY,FR PS=DI,FR TE=SY TD=SY TH=SY
LE
LEARN COMMUN EFFECT
LK
LEADER EVIRON
FI PH(1,1) PH(2,1) PH(2,2) PS(1,1) PS(2,2) PS(3,3)
FR LY(1,3) LY(2,3) LY(3,3) LY(4,3) LY(5,3) LY(6,1) LY(7,1) LY(8,1) LY(9,1)
FR LY(10,1) LY(11,2) LY(12,2) LY(13,2) LY(14,2) LX(1,1) LX(2,1) LX(3,1) LX(4,1)
FR LX(5,1) LX(6,2) LX(7,2) LX(8,2) BE(1,2) BE(3,1) BE(3,2) GA(1,1) GA(1,2)
```

FR GA(2,1) GA(2,2) GA(3,1) GA(3,2) PH(1,1) PH(2,2) PS(1,1) PS(2,2) PS(3,3)

FR PH 2,1 TE 14,13 TD 5,4 TE 5,4 TH 8,2 TE 12,11 TH 1,4 TH 1,5 TD 7,6 TE 8,7 TE 7,6

FR TH 4,14 TH 8,11 te 2,1 td 8,4 te 3,2 te 3,1 th 5,11 te 8,6 te 14,12 TE 13,12 TH 2,4 TE 9,8

FR TE 9,7 TH 8,10 TH 7,7 TE 11,10 TH 4,4 TH 8,8 TE 14,9 TH 4,9 TE 13,9 TE 9,5 TE 14,4 TH 2,14

FR TH 8,14 TH 1,14 TE 11,1 TH 8,11 TH 8,13 TH 6,11 TH 1,8 TE 13,2 TE 14,2 TE 12,10 TH 8,1 Te 7,3

FR TE 10,4 TH 5,11 TH 5,10 TE 13,10 TD 4,2 TH 5,7 TH 5,14 TH 7,9 TH 7,8 TE 14,10 TD 7,1 TH 2,12

FR TH 6,2 TH 2,9 TH 5,6 TD 4,3 TH 5,4 TH 3,4 TD 3,2 TH 5,5 TH 4,8 TE 4,2 TH 3,14

PD

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

TI path

Number of Input Variables 23

Number of Y – Variables 14

Number of X – Variables 8

Number of ETA – Variables 3

Number of KSI – Variables 2

Number of Observations 440

TI path

Covariance Matrix

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
ADAP	0.28					
ACOM	0.18	0.24				
ATIT	0.17	0.18	0.23			
MANA	0.10	0.12	0.12	0.20		
SATI	0.14	0.15	0.15	0.14	0.22	
EDUC	0.15	0.16	0.15	0.12	0.16	0.23
STAN	0.16	0.17	0.17	0.12	0.16	0.21
COLE	0.15	0.16	0.15	0.11	0.15	0.19
DEVE	0.14	0.15	0.14	0.12	0.15	0.18
LEAR	0.14	0.15	0.14	0.11	0.15	0.17
TEAM	0.14	0.14	0.14	0.12	0.14	0.17
VSIO	0.13	0.14	0.14	0.12	0.14	0.16
LONG	0.12	0.12	0.12	0.12	0.14	0.14
FRIE	0.12	0.12	0.13	0.13	0.14	0.15

VISI	0.09	0.10	0.10	0.13	0.13	0.12
MOTI	0.12	0.12	0.13	0.13	0.14	0.14
KNOW	0.12	0.12	0.13	0.12	0.14	0.15
ETHI	0.11	0.10	0.11	0.12	0.13	0.13
RELA	0.11	0.11	0.12	0.12	0.14	0.15
PHYS	0.12	0.13	0.12	0.09	0.12	0.15
PSYC	0.14	0.14	0.14	0.11	0.15	0.17
SOCI	0.11	0.10	0.12	0.10	0.13	0.15

Covariance Matrix

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
STAN	0.29					
COLE	0.22	0.23				
DEVE	0.20	0.19	0.22			
LEAR	0.19	0.18	0.18	0.21		
TEAM	0.19	0.18	0.17	0.18	0.26	
VSIO	0.18	0.17	0.17	0.17	0.22	0.25
LONG	0.16	0.16	0.16	0.16	0.17	0.18
FRIE	0.16	0.16	0.17	0.16	0.18	0.20
VISI	0.12	0.12	0.12	0.11	0.12	0.13
MOTI	0.14	0.14	0.14	0.14	0.15	0.15
KNOW	0.14	0.14	0.14	0.14	0.15	0.15
ETHI	0.13	0.12	0.14	0.13	0.14	0.14
RELA	0.15	0.14	0.14	0.14	0.16	0.15
PHYS	0.16	0.15	0.14	0.14	0.15	0.14
PSYC	0.19	0.16	0.16	0.16	0.16	0.16
SOCI	0.15	0.14	0.15	0.13	0.14	0.14

Covariance Matrix

	LONG	FRIE	VISI	MOTI	KNOW	ETHI
LONG	0.23					
FRIE	0.20	0.26				
VISI	0.12	0.14	0.20			
MOTI	0.14	0.17	0.16	0.25		
KNOW	0.14	0.15	0.16	0.21	0.25	

ETHI	0.14	0.17	0.16	0.21	0.21	0.28
RELA	0.14	0.16	0.16	0.20	0.20	0.22
PHYS	0.12	0.13	0.10	0.13	0.13	0.12
PSYC	0.15	0.15	0.11	0.15	0.15	0.14
SOCI	0.15	0.16	0.13	0.16	0.16	0.17

Covariance Matrix

	RELA	PHYS	PSYC	SOCI
RELA	0.26			
PHYS	0.13	0.24		
PSYC	0.15	0.18	0.27	
SOCI	0.16	0.14	0.17	0.24

TI path

Parameter Specifications

LAMBDA-Y

	LEARN	COMMUN	EFFECT
ADAP	0	0	0
ACOM	0	0	1
ATIT	0	0	2
MANA	0	0	3
SATI	0	0	4
EDUC	0	0	0
STAN	5	0	0
COLE	6	0	0
DEVE	7	0	0
LEAR	8	0	0
TEAM	0	0	0
VSIO	0	9	0
LONG	0	10	0
FRIE	0	11	0

LAMBDA-X

	LEADER	EVIRON

```
VISI          12          0
MOTI          13          0
KNOW          14          0
ETHI          15          0
RELA          16          0
PHYS           0         17
PSYC           0         18
SOCI           0         19


    BETA
          LEARN     COMMUN     EFFECT
        --------   --------   --------
 LEARN          0         20          0
COMMUN          0          0          0
EFFECT         21         22          0

    GAMMA
          LEADER     EVIRON
        --------   --------
 LEARN         23         24
COMMUN         25         26
EFFECT         27         28

    PHI
          LEADER     EVIRON
        --------   --------
LEADER          0
EVIRON         29          0

    PSI
          LEARN     COMMUN     EFFECT
        --------   --------   --------
            30         31         32

    THETA-EPS
          ADAP       ACOM       ATIT       MANA       SATI       EDUC
        --------   --------   --------   --------   --------   --------
 ADAP         33
 ACOM         34         35
```

ATIT	36	37	38			
MANA	0	39	0	40		
SATI	0	0	0	41	42	
EDUC	0	0	0	0	0	43
STAN	0	0	44	0	0	45
COLE	0	0	0	0	0	47
DEVE	0	0	0	0	50	0
LEAR	0	0	0	54	0	0
TEAM	56	0	0	0	0	0
VSIO	0	0	0	0	0	0
LONG	0	62	0	0	0	0
FRIE	0	67	0	68	0	0

THETA-EPS

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
STAN	46					
COLE	48	49				
DEVE	51	52	53			
LEAR	0	0	0	55		
TEAM	0	0	0	57	58	
VSIO	0	0	0	59	60	61
LONG	0	0	63	64	0	65
FRIE	0	0	69	70	0	71

THETA-EPS

	LONG	FRIE
LONG	66	
FRIE	72	73

THETA-DELTA-EPS

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
VISI	0	0	0	74	75	0
MOTI	0	0	0	79	0	0
KNOW	0	0	0	84	0	0
ETHI	0	0	0	88	0	0
RELA	0	0	0	95	96	97
PHYS	0	104	0	0	0	0
PSYC	0	0	0	0	0	0
SOCI	113	114	0	0	0	0

THETA-DELTA-EPS

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
VISI	0	76	0	0	0	0
MOTI	0	0	80	0	0	81
KNOW	0	0	0	0	0	0
ETHI	0	89	90	0	0	0
RELA	98	0	0	99	100	0
PHYS	0	0	0	0	105	0
PSYC	107	108	109	0	0	0
SOCI	0	115	0	116	117	0

THETA-DELTA-EPS

	LONG	FRIE
VISI	0	77
MOTI	0	82
KNOW	0	85
ETHI	0	91
RELA	0	101
PHYS	0	0
PSYC	0	0
SOCI	118	119

THETA-DELTA

	VISI	MOTI	KNOW	ETHI	RELA	PHYS

VISI	78					
MOTI	0	83				
KNOW	0	86	87			
ETHI	0	92	93	94		
RELA	0	0	0	102	103	
PHYS	0	0	0	0	0	106
PSYC	110	0	0	0	0	111
SOCI	0	0	0	120	0	0

THETA-DELTA

	PSYC	SOCI
PSYC	112	
SOCI	0	121

TI path

Number of Iterations =125

LISREL Estimates (Maximum Likelihood)

LAMBDA-Y

	LEARN	COMMUN	EFFECT
ADAP	- -	- -	0.36
ACOM	- -	- -	0.39
			(0.02)
			18.60
ATIT	- -	- -	0.38
			(0.02)
			16.90
MANA	- -	- -	0.30
			(0.02)
			12.81
SATI	- -	- -	0.39
			(0.02)

15.55

EDUC 0.42 - - - -

STAN 0.45 - - - -
(0.02)
28.89

COLE 0.43 - - - -
(0.01)
29.67

DEVE 0.42 - - - -
(0.02)
27.21

LEAR 0.41 - - - -
(0.01)
27.53

TEAM - - 0.44 - -

VSIO - - 0.43 - -
(0.01)
29.85

LONG - - 0.39 - -
(0.02)
21.40

FRIE - - 0.41 - -
(0.02)
20.43

LAMBDA-X

	LEADER	EVIRON
VISI	0.35	- -
	(0.02)	
	20.31	

MOTI 0.45 - -
(0.02)
23.72

KNOW 0.45 - -
(0.02)
23.46

ETHI 0.43 - -
(0.02)
20.52

RELA 0.44 - -
(0.02)
22.78

PHYS - - 0.36
(0.02)
17.38

PSYC - - 0.43
(0.02)
20.26

SOCI - - 0.40
(0.02)
20.00

BETA

	LEARN	COMMUN	EFFECT
LEARN	- -	0.52	- -
		(0.09)	
		5.87	
COMMUN	- -	- -	- -

EFFECT 1.20 0.15 - -
(0.26) (0.15)
4.66 5.88

GAMMA

	LEADER	EVIRON
LEARN	0.11	0.57
	(0.06)	(0.11)
	2.98	5.36
COMMUN	0.18	0.72
	(0.08)	(0.09)
	3.10	8.24
EFFECT	0.20	0.30
	(0.09)	(0.22)
	2.97	3.39

Covariance Matrix of ETA and KSI

	LEARN	COMMUN	EFFECT	LEADER	EVIRON
LEARN	1.00				
COMMUN	0.93	1.00			
EFFECT	0.93	0.85	1.00		
LEADER	0.75	0.77	0.74	1.00	
EVIRON	0.93	0.87	0.84	0.82	1.00

PHI

	LEADER	EVIRON
LEADER	1.00	
EVIRON	0.82	1.00
	(0.02)	
	34.37	

PSI

Note: This matrix is diagonal.

	LEARN	COMMUN	EFFECT
	0.08	0.24	0.12
	(0.02)	(0.04)	(0.03)
	3.63	6.27	3.43

Squared Multiple Correlations for Structural Equations

LEARN	COMMUN	EFFECT
0.92	0.76	0.88

Squared Multiple Correlations for Reduced Form

LEARN	COMMUN	EFFECT
0.86	0.76	0.72

Reduced Form

	LEADER	EVIRON
LEARN	0.02	0.94
	(0.08)	(0.09)
	0.21	10.40
COMMUN	0.18	0.72
	(0.08)	(0.09)
	2.20	8.24
EFFECT	0.16	0.60
	(0.09)	(0.10)
	1.75	7.21

THETA-EPS

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
ADAP	0.15					
	(0.01)					

13.30

ACOM 0.04 0.09
(0.01) (0.01)
5.95 11.90

ATIT 0.03 0.03 0.09
(0.01) (0.01) (0.01)
3.98 4.71 12.11

MANA – – 0.01 – – 0.11
(0.00) (0.01)
1.71 13.20

SATI – – – – – – 0.02 0.06
(0.01) (0.01)
3.39 10.81

EDUC – – – – – – – – – – 0.05
(0.00)
12.32

STAN – – – – 0.01 – – – – 0.02
(0.00) (0.00)
2.16 5.39

COLE – – – – – – – – – – 0.01
(0.00)
2.72

DEVE – – – – – – – – 0.01 – –
(0.00)
2.71

LEAR – – – – – – 0.01 – – – –
(0.00)
2.46

TEAM 0.01 - - - - - - - - - -
(0.00)
2.29

VSIO - - - - - - - - - - - -

LONG - - 0.01 - - - - - - - -
(0.00)
3.20

FRIE - - 0.01 - - 0.01 - - - -
(0.00) (0.00)
2.12 3.47

THETA-EPS

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
STAN	0.08					
	(0.01)					
	12.60					
COLE	0.02	0.05				
	(0.00)	(0.00)				
	5.45	10.56				
DEVE	0.01	0.01	0.04			
	(0.00)	(0.00)	(0.00)			
	3.16	2.68	11.45			
LEAR	- -	- -	- -	0.04		
				(0.00)		
				11.34		
TEAM	- -	- -	- -	0.02	0.06	
				(0.00)	(0.01)	
				4.58	9.84	
VSIO	- -	- -	- -	0.01	0.03	0.07

(0.00) (0.01) (0.01)
3.42 5.76 10.43

LONG - - - - 0.01 0.01 - - 0.01
(0.00) (0.00) (0.00)
3.59 2.94 3.58

FRIE - - - - 0.02 0.01 - - 0.02
(0.00) (0.00) (0.00)
4.58 1.99 4.78

THETA-EPS

	LONG	FRIE
LONG	0.07	
	(0.01)	
	11.29	
FRIE	0.04	0.09
	(0.01)	(0.01)
	7.34	12.18

Squared Multiple Correlations for Y - Variables

ADAP	ACOM	ATIT	MANA	SATI	EDUC
0.47	0.64	0.62	0.46	0.70	0.77

Squared Multiple Correlations for Y - Variables

STAN	COLE	DEVE	LEAR	TEAM	VSIO
0.71	0.80	0.80	0.81	0.75	0.72

Squared Multiple Correlations for Y - Variables

	LONG	FRIE
	0.69	0.64

THETA-DELTA-EPS

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
VISI	- -	- -	- -	0.04	0.02	- -
				(0.01)	(0.00)	
				7.69	5.54	
MOTI	- -	- -	- -	0.03	- -	- -
				(0.01)		
				4.78		
KNOW	- -	- -	- -	0.02	- -	- -
				(0.01)		
				2.85		
ETHI	- -	- -	- -	0.02	- -	- -
				(0.01)		
				4.17		
RELA	- -	- -	- -	0.02	0.01	0.01
				(0.01)	(0.00)	(0.00)
				3.92	2.36	2.57
PHYS	- -	0.01	- -	- -	- -	- -
		(0.00)				
		1.85				
PSYC	- -	- -	- -	- -	- -	- -
SOCI	-0.01	-0.02	- -	- -	- -	- -
	(0.01)	(0.00)				
	-2.04	-5.25				

THETA-DELTA-EPS

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
VISI	- -	0.00	- -	- -	- -	- -
		(0.00)				
		1.86				
MOTI	- -	- -	0.00	- -	- -	0.01
			(0.00)			(0.00)
			-2.07			2.15
KNOW	- -	- -	- -	- -	- -	- -
ETHI	- -	-0.01	0.00	- -	- -	- -
		(0.00)	(0.00)			
		-2.06	1.43			
RELA	0.01	- -	- -	0.01	0.01	- -
	(0.00)			(0.00)	(0.00)	
	3.42			3.58	3.55	
PHYS	- -	- -	- -	- -	0.01	- -
					(0.00)	
					2.26	
PSYC	0.01	-0.01	-0.01	- -	- -	- -
	(0.00)	(0.00)	(0.00)			
	1.52	-3.02	-3.35			
SOCI	- -	-0.01	- -	-0.01	-0.01	- -
		(0.00)		(0.00)	(0.00)	
		-3.70		-3.90	-3.21	

THETA-DELTA-EPS

	LONG	FRIE
VISI	- -	0.01
		(0.00)

3.77

MOTI - - 0.02
(0.00)
4.41

KNOW - - 0.01
(0.00)
2.05

ETHI - - 0.03
(0.00)
5.12

RELA - - 0.01
(0.00)
3.15

PHYS - - - -

PSYC - - - -

SOCI 0.01 0.02
(0.00) (0.00)
3.38 4.16

THETA-DELTA

	VISI	MOTI	KNOW	ETHI	RELA	PHYS
VISI	0.07					
	(0.01)					
	12.64					
MOTI	- -	0.05				
		(0.01)				
		8.90				

KNOW	- -	0.01	0.05		
		(0.00)	(0.01)		
		2.24	9.09		
ETHI	- -	0.01	0.01	0.08	
		(0.00)	(0.00)	(0.01)	
		3.04	2.40	10.59	
RELA	- -	- -	- -	0.03	0.06
				(0.00)	(0.01)
				5.38	10.95
PHYS	- -	- -	- -	- -	- -	0.11
						(0.01)
						12.75
PSYC	-0.01	- -	- -	- -	- -	0.03
	(0.00)					(0.01)
	-2.50					4.38
SOCI	- -	- -	- -	0.02	- -	- -
				(0.00)		
				4.06		

THETA-DELTA

	PSYC	SOCI
PSYC	0.09	
	(0.01)	
	11.07	
SOCI	- -	0.08
		(0.01)
		11.59

Squared Multiple Correlations for X – Variables

VISI	MOTI	KNOW	ETHI	RELA	PHYS
0.65	0.81	0.80	0.69	0.76	0.55

Squared Multiple Correlations for X – Variables

PSYC	SOCI
0.68	0.66

0.15159D+00 0.41052D-01 0.85570D-01 0.27131D-01 0.25982D-01 0.88527D-01
0.00000D+00 0.68790D-02 0.00000D+00 0.10585D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.17047D-01 0.63338D-01 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.54603D-01 0.00000D+00 0.00000D+00 0.74193D-02
0.00000D+00 0.00000D+00 0.21065D-01 0.81999D-01 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.85211D-02 0.22934D-01 0.45959D-01
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 -0.74674D-02 0.00000D+00
0.10496D-01 0.78781D-02 0.44193D-01 0.00000D+00 0.00000D+00 0.00000D+00
-0.73036D-02 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.38741D-01 0.91745D-02 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.16725D-01 0.62342D-01
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.12713D-01 0.29401D-01 0.72076D-01
0.00000D+00 -0.11467D-01 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.10990D-01 0.10350D-01 0.00000D+00 0.13952D-01
0.70920D-01 0.00000D+00 -0.79879D-02 0.00000D+00 0.13712D-01 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.15405D-01 0.72368D-02 0.00000D+00
0.19958D-01 0.40823D-01 0.91071D-01 0.00000D+00 0.00000D+00 0.00000D+00
0.42734D-01 0.21793D-01 0.00000D+00 0.00000D+00 0.46760D-02 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.14972D-01 0.66310D-01
0.00000D+00 0.00000D+00 0.00000D+00 0.25715D-01 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 -0.49750D-02 0.00000D+00 0.00000D+00 0.55851D-02
0.00000D+00 0.19742D-01 0.00000D+00 0.47054D-01 0.00000D+00 0.00000D+00
0.00000D+00 0.15507D-01 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.90818D-02
0.00000D+00 0.97430D-02 0.50155D-01 0.00000D+00 0.00000D+00 0.00000D+00
0.24217D-01 0.00000D+00 0.00000D+00 0.00000D+00 -0.54917D-02 0.41302D-02
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.25507D-01 0.00000D+00
0.13396D-01 0.10675D-01 0.83454D-01 0.00000D+00 0.00000D+00 0.00000D+00
0.21897D-01 0.79223D-02 0.75757D-02 0.10892D-01 0.00000D+00 0.00000D+00

0.92674D-02 0.10290D-01 0.00000D+00 0.00000D+00 0.13959D-01 0.00000D+00
0.00000D+00 0.00000D+00 0.25230D-01 0.61195D-01 0.00000D+00 0.75865D-02
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.81352D-02 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.10994D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00
0.62484D-02 -0.10683D-01 -0.11444D-01 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.00000D+00 -0.92820D-02 0.00000D+00 0.00000D+00 0.00000D+00
0.00000D+00 0.27792D-01 0.87450D-01 -0.11377D-01 -0.23169D-01 0.00000D+00
0.00000D+00 0.00000D+00 0.00000D+00 0.00000D+00 -0.11716D-01 0.00000D+00
-0.12540D-01 -0.11521D-01 0.00000D+00 0.14521D-01 0.19156D-01 0.00000D+00
0.00000D+00 0.00000D+00 0.15660D-01 0.00000D+00 0.00000D+00 0.00000D+00
0.81692D-01

TH was written to file C:\Users\Tong\Desktop\Aor\path.OUT

Goodness of Fit Statistics

Degrees of Freedom = 132
Minimum Fit Function Chi-Square = 156.89 (P = 0.069)
Normal Theory Weighted Least Squares Chi-Square = 154.73 (P = 0.086)
Estimated Non-centrality Parameter (NCP) = 22.73
90 Percent Confidence Interval for NCP = (0.0 ; 57.89)

Minimum Fit Function Value = 0.36
Population Discrepancy Function Value (F0) = 0.052
90 Percent Confidence Interval for F0 = (0.0 ; 0.13)
Root Mean Square Error of Approximation (RMSEA) = 0.020
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.032)
P-Value for Test of Close Fit (RMSEA < 0.05) = 1.00

Expected Cross-Validation Index (ECVI) = 0.90
90 Percent Confidence Interval for ECVI = (0.85 ; 0.98)
ECVI for Saturated Model = 1.15
ECVI for Independence Model = 86.63

Chi-Square for Independence Model with 231 Degrees of Freedom = 37986.22
Independence AIC = 38030.22

Model AIC = 396.73

Saturated AIC = 506.00

Independence CAIC = 38142.13

Model CAIC = 1012.23

Saturated CAIC = 1792.95

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.57

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 484.27

Root Mean Square Residual (RMR) = 0.0059

Standardized RMR = 0.025

Goodness of Fit Index (GFI) = 0.97

Adjusted Goodness of Fit Index (AGFI) = 0.94

Parsimony Goodness of Fit Index (PGFI) = 0.51

TI path

Fitted Covariance Matrix

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
ADAP	0.28					
ACOM	0.18	0.24				
ATIT	0.16	0.17	0.23			
MANA	0.11	0.12	0.11	0.20		
SATI	0.14	0.15	0.15	0.13	0.21	
EDUC	0.14	0.15	0.15	0.12	0.15	0.23
STAN	0.15	0.16	0.17	0.13	0.16	0.21
COLE	0.14	0.16	0.15	0.12	0.15	0.19
DEVE	0.14	0.15	0.15	0.12	0.15	0.18
LEAR	0.14	0.15	0.14	0.11	0.15	0.17
TEAM	0.14	0.15	0.14	0.11	0.14	0.17

VSIO	0.13	0.14	0.14	0.11	0.14	0.17
LONG	0.12	0.12	0.13	0.10	0.13	0.15
FRIE	0.13	0.13	0.13	0.12	0.13	0.16
VISI	0.10	0.10	0.10	0.12	0.12	0.11
MOTI	0.12	0.13	0.13	0.12	0.13	0.14
KNOW	0.12	0.13	0.13	0.12	0.13	0.14
ETHI	0.12	0.13	0.12	0.12	0.12	0.14
RELA	0.12	0.13	0.12	0.12	0.14	0.15
PHYS	0.11	0.13	0.12	0.09	0.12	0.14
PSYC	0.13	0.14	0.14	0.11	0.14	0.17
SOCI	0.11	0.11	0.13	0.10	0.13	0.16

Fitted Covariance Matrix

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
STAN	0.28					
COLE	0.22	0.23				
DEVE	0.20	0.19	0.22			
LEAR	0.18	0.18	0.17	0.21		
TEAM	0.18	0.17	0.17	0.18	0.25	
VSIO	0.18	0.17	0.17	0.17	0.22	0.25
LONG	0.16	0.16	0.16	0.16	0.17	0.18
FRIE	0.17	0.16	0.17	0.16	0.18	0.19
VISI	0.12	0.12	0.11	0.11	0.12	0.12
MOTI	0.15	0.14	0.14	0.14	0.15	0.15
KNOW	0.15	0.14	0.14	0.14	0.15	0.15
ETHI	0.15	0.13	0.14	0.13	0.15	0.14
RELA	0.16	0.14	0.14	0.15	0.16	0.15
PHYS	0.15	0.14	0.14	0.14	0.15	0.13
PSYC	0.18	0.16	0.16	0.16	0.16	0.16
SOCI	0.17	0.15	0.15	0.14	0.14	0.15

Fitted Covariance Matrix

	LONG	FRIE	VISI	MOTI	KNOW	ETHI
LONG	0.23					
FRIE	0.20	0.26				

VISI	0.11	0.13	0.19			
MOTI	0.14	0.16	0.16	0.25		
KNOW	0.14	0.15	0.16	0.21	0.25	
ETHI	0.13	0.16	0.15	0.21	0.21	0.27
RELA	0.13	0.15	0.16	0.20	0.20	0.22
PHYS	0.12	0.13	0.11	0.13	0.13	0.13
PSYC	0.15	0.15	0.11	0.16	0.16	0.15
SOCI	0.15	0.16	0.11	0.15	0.15	0.16

Fitted Covariance Matrix

	RELA	PHYS	PSYC	SOCI
RELA	0.26			
PHYS	0.13	0.24		
PSYC	0.15	0.18	0.27	
SOCI	0.14	0.14	0.17	0.24

Fitted Residuals

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
ADAP	0.00					
ACOM	0.00	0.00				
ATIT	0.00	0.00	0.00			
MANA	-0.01	0.00	0.01	0.00		
SATI	0.00	0.00	0.00	0.00	0.00	
EDUC	0.01	0.01	0.01	0.00	0.01	0.00
STAN	0.01	0.01	0.00	-0.01	0.00	0.00
COLE	0.01	0.01	0.00	-0.01	0.00	0.00
DEVE	0.00	0.00	0.00	0.00	0.00	0.00
LEAR	0.00	0.00	0.00	0.00	0.00	0.00
TEAM	0.00	-0.01	0.00	0.00	0.00	0.00
VSIO	0.00	0.00	0.00	0.01	0.00	-0.01
LONG	0.00	0.00	-0.01	0.02	0.01	-0.01
FRIE	-0.01	-0.01	0.00	0.01	0.01	-0.01
VISI	0.00	-0.01	0.00	0.00	0.01	0.01
MOTI	0.00	-0.01	0.00	0.00	0.01	0.00

KNOW	0.00	−0.01	0.00	0.00	0.01	0.01
ETHI	−0.01	−0.02	−0.01	0.00	0.00	0.00
RELA	−0.01	−0.02	−0.01	0.00	0.00	0.00
PHYS	0.01	0.00	0.00	0.00	0.00	0.01
PSYC	0.01	0.00	0.00	0.01	0.01	0.01
SOCI	0.00	−0.01	−0.01	0.00	0.00	0.00

Fitted Residuals

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
STAN	0.00					
COLE	0.00	0.00				
DEVE	0.00	0.00	0.00			
LEAR	0.00	0.00	0.00	0.00		
TEAM	0.01	0.01	0.00	0.00	0.00	
VSIO	0.01	0.00	0.00	0.00	0.00	0.00
LONG	0.00	0.00	0.00	0.00	0.00	0.00
FRIE	−0.01	0.00	0.00	0.00	0.00	0.00
VISI	0.00	0.00	0.00	0.01	0.01	0.01
MOTI	−0.01	−0.01	0.00	0.00	0.00	0.00
KNOW	−0.01	−0.01	0.00	0.00	−0.01	0.00
ETHI	−0.02	−0.01	−0.01	−0.01	−0.01	0.00
RELA	−0.01	0.00	0.00	0.00	0.00	0.00
PHYS	0.00	0.00	0.00	0.00	0.00	0.00
PSYC	0.00	0.00	0.00	0.00	0.00	0.00
SOCI	−0.01	−0.01	−0.01	0.00	0.00	0.00

Fitted Residuals

	LONG	FRIE	VISI	MOTI	KNOW	ETHI
LONG	0.00					
FRIE	0.00	0.01				
VISI	0.01	0.01	0.00			
MOTI	0.01	0.01	0.00	0.00		
KNOW	0.00	0.00	0.00	0.00	0.00	
ETHI	0.00	0.01	0.01	0.01	0.00	0.01
RELA	0.01	0.01	0.00	0.00	0.00	0.00

PHYS	0.00	0.00	0.00	0.00	0.00	−0.01
PSYC	0.00	0.00	0.00	−0.01	−0.01	−0.01
SOCI	0.00	0.00	0.01	0.01	0.02	0.01

Fitted Residuals

	RELA	PHYS	PSYC	SOCI
RELA	0.00			
PHYS	0.00	0.00		
PSYC	−0.01	0.00	0.00	
SOCI	0.02	0.00	0.00	0.00

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = −0.02
Median Fitted Residual = 0.00
Largest Fitted Residual = 0.02

Stemleaf Plot

```
−20|4
−18|3
−16|
−14|9
−12|222
−10|44921
− 8|8655766550
− 6|99887998776441
− 4|9776528876332
− 2|554332211186665332211100
− 0|9887664432211100988887777776654443332211 0
  0|22223334455666679999900122233356666778999 9
  2|000000223334466688999991114445666678 9
  4|033566677788911122333557 7
  6|134478801133556
  8|0255056
 10|38
 12|35823
```

14|4446

16|17

Standardized Residuals

	ADAP	ACOM	ATIT	MANA	SATI	EDUC
ADAP	-0.44					
ACOM	0.21	1.40				
ATIT	1.12	1.83	1.09			
MANA	-1.20	-0.90	1.40	1.06		
SATI	-0.94	0.39	0.35	1.57	1.42	
EDUC	1.90	3.15	1.52	-0.28	2.01	0.58
STAN	2.27	2.35	0.78	-1.68	-0.22	0.93
COLE	1.58	1.81	-0.25	-1.99	-0.78	1.07
DEVE	-0.02	-0.25	-1.54	0.17	0.17	-1.03
LEAR	1.17	-0.15	-0.67	1.42	0.07	-1.27
TEAM	-0.83	-2.14	-0.27	1.00	-0.47	-0.84
VSIO	-0.54	-0.61	0.68	2.92	0.93	-2.78
LONG	-0.12	-1.26	-1.31	3.24	1.90	-3.50
FRIE	-0.82	-1.73	-0.58	3.50	1.56	-3.35
VISI	-0.33	-1.40	0.89	1.71	2.19	1.66
MOTI	-0.66	-2.85	0.13	1.55	1.65	-0.34
KNOW	-0.15	-2.39	0.41	1.96	2.28	1.23
ETHI	-1.29	-3.80	-1.37	0.70	0.11	-0.96
RELA	-0.99	-3.80	-1.28	-0.25	0.40	0.51
PHYS	1.01	-0.29	-0.06	-0.45	-0.45	1.97
PSYC	0.83	-0.10	0.98	1.27	1.38	2.14
SOCI	-0.52	-2.17	-1.20	0.75	0.60	-1.38

Standardized Residuals

	STAN	COLE	DEVE	LEAR	TEAM	VSIO
STAN	0.88					
COLE	1.49	2.47				
DEVE	-0.64	1.35	-1.64			
LEAR	0.96	2.56	2.12	1.32		
TEAM	2.75	2.97	1.31	1.29	1.37	

VSIO	1.39	0.91	1.48	0.58	1.15	0.32
LONG	-0.99	-0.02	-0.51	0.17	1.48	1.34
FRIE	-1.91	-0.19	-0.38	0.12	0.33	1.27
VISI	-0.90	-0.60	0.83	1.38	1.28	2.29
MOTI	-2.04	-2.29	-0.62	-0.34	-0.28	0.66
KNOW	-1.55	-1.64	-0.58	-0.11	-1.57	-0.53
ETHI	-2.68	-3.21	-1.72	-1.84	-1.24	-0.17
RELA	-1.56	-1.15	0.40	-0.63	-0.05	1.05
PHYS	0.77	1.05	-0.02	-0.36	0.42	0.43
PSYC	1.18	1.65	1.52	0.50	0.01	-0.20
SOCI	-3.13	-4.48	-3.35	-2.63	-0.50	-0.83

Standardized Residuals

	LONG	FRIE	VISI	MOTI	KNOW	ETHI
LONG	1.03					
FRIE	2.38	2.67				
VISI	3.13	4.00	3.19			
MOTI	1.85	2.74	2.26	1.88		
KNOW	0.53	1.34	2.14	1.95	2.06	
ETHI	0.95	1.65	3.25	3.45	3.48	4.02
RELA	1.63	2.60	1.17	1.85	1.44	2.58
PHYS	-0.70	0.10	-0.67	-0.15	0.05	-1.68
PSYC	0.43	0.66	-0.46	-2.44	-2.06	-2.27
SOCI	-1.52	-0.11	2.74	3.29	4.17	3.36

Standardized Residuals

	RELA	PHYS	PSYC	SOCI
RELA	1.03			
PHYS	-0.51	-1.13		
PSYC	-1.89	-0.22	-0.20	
SOCI	4.03	-0.95	1.01	0.33

Summary Statistics for Standardized Residuals

Smallest Standardized Residual = -4.48
Median Standardized Residual = 0.33
Largest Standardized Residual = 4.17

Stemleaf Plot

- 4|5
- 4|
- 3|885
- 3|4321
- 2|8876
- 2|443321100
- 1|99877776666555
- 1|444333332221100000
- 0|999888887777666666555555555
- 0|444433333333332222222211111110000
  0|111111222233344444444
  0|555666777788888999999
  1|000000000111111222233333333344444444
  1|555555666666777888899999
  2|00011112333344
  2|566677789
  3|01122334
  3|555
  4|0002

Largest Negative Standardized Residuals

Residual for VSIO and EDUC -2.78
Residual for LONG and EDUC -3.50
Residual for FRIE and EDUC -3.35
Residual for MOTI and ACOM -2.85
Residual for ETHI and ACOM -3.80
Residual for ETHI and STAN -2.68
Residual for ETHI and COLE -3.21
Residual for RELA and ACOM -3.80
Residual for SOCI and STAN -3.13
Residual for SOCI and COLE -4.48
Residual for SOCI and DEVE -3.35

Residual for SOCI and LEAR −2.63

Largest Positive Standardized Residuals

Residual for EDUC and ACOM 3.15

Residual for TEAM and STAN 2.75

Residual for TEAM and COLE 2.97

Residual for VSIO and MANA 2.92

Residual for LONG and MANA 3.24

Residual for FRIE and MANA 3.50

Residual for FRIE and FRIE 2.67

Residual for VISI and LONG 3.13

Residual for VISI and FRIE 4.00

Residual for VISI and VISI 3.19

Residual for MOTI and FRIE 2.74

Residual for ETHI and VISI 3.25

Residual for ETHI and MOTI 3.45

Residual for ETHI and KNOW 3.48

Residual for ETHI and ETHI 4.02

Residual for RELA and FRIE 2.60

Residual for RELA and ETHI 2.58

Residual for SOCI and VISI 2.74

Residual for SOCI and MOTI 3.29

Residual for SOCI and KNOW 4.17

Residual for SOCI and ETHI 3.36

Residual for SOCI and RELA 4.03

TI path

Qplot of Standardized Residuals