

ภาคผนวก ช

ผลการวิเคราะห์ข้อมูลด้วยโปรแกรม LISREL 8.52

มหาวิทยาลัยราชภัฏสุราษฎร์ธานี



แสดงผลการวิเคราะห์ข้อมูล องค์ประกอบรวมสมรรถนะด้านเทคโนโลยีสารสนเทศและการสื่อสารของครูคอมพิวเตอร์  
ในโรงเรียนสังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสกลนคร เขต 1

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BY

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TI

!DA NI=16 NO=401 NG=1 MA=CM

SY='C:\Users\admin\Desktop\AICT\AICT\AICT.dsf' NG=1

SE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 /

MO NY=16 NK=1 NE=5 LY=FU,FI BE=FU,FI GA=FU,FI PH=SY,FR PS=DI,FR TE=DI,FR TE=SY,FI

LE

KICT ICTC ICTL ICTT ICTD

LK

AICT

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

FR LY(10,3) LY(11,4) LY(12,4) LY(13,4) LY(14,5) LY(15,5) LY(16,5) GA(1,1) GA(2,1)

FR GA(3,1) GA(4,1) GA(5,1)

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 TE 11 11

FR TE 12 12 TE 13 13 TE 14 14 TE 15 15 TE 16 16 TE 13 1 TE 14 16 TE 2 7 TE 2 6 TE 1 6 TE 6 14 TE 15 16 TE 11

15 TE 1 4 TE 3 6

FR TE 7 14 TE 2 1 TE 7 9 TE 2 5 TE 7 12 TE 4 5 TE 4 6 TE 1 3 TE 5 12 TE 10 11 TE 2 1 TE 9 15 TE 10 3 TE 10 16

TE 3 16 TE 1 14

FR TE 5 13 TE 7 13 TE 5 13 TE 5 10 TE 9 14 TE 11 12 TE 12 15 TE 12 16 TE 11 16 TE 8 14 TE 4 12 TE 4 14 TE 5  
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FR TE 9 10 TE 11 13 TE 2 4 TE 3 5 TE 3 7 TE 6 9 TE 4 7 TE 2 13 TE 1 5 TE 1 7 TE 1 15 TE 7 10 TE 16 3 TE 5 16  
TE 10 12 TE 5 6

FR TE 8 16 TE 9 16

PD

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

TI

Number of Input Variables 16

Number of Y - Variables 16

Number of X - Variables 0

Number of ETA - Variables 5

Number of KSI - Variables 1

Number of Observations 401

TI

Covariance Matrix

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	0.32					
KICT2	0.30	0.40				
KICT3	0.23	0.29	0.34			
KICT4	0.25	0.30	0.26	0.42		
ICTC1	0.22	0.28	0.22	0.26	0.33	
ICTC2	0.31	0.39	0.29	0.32	0.29	0.46
ICTC3	0.26	0.35	0.25	0.26	0.28	0.34
ICTL1	0.19	0.21	0.17	0.21	0.20	0.21
ICTL2	0.27	0.30	0.23	0.27	0.24	0.30
ICTL3	0.22	0.22	0.17	0.20	0.21	0.21
ICTT1	0.25	0.26	0.19	0.22	0.20	0.24
ICTT2	0.28	0.28	0.22	0.28	0.20	0.26
ICTT3	0.33	0.27	0.21	0.24	0.20	0.26
ICTD1	0.28	0.27	0.21	0.22	0.20	0.24
ICTD2	0.26	0.24	0.18	0.23	0.19	0.23
ICTD3	0.28	0.28	0.18	0.26	0.19	0.27

## Covariance Matrix

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	0.41					
ICTL1	0.19	0.46				
ICTL2	0.25	0.29	0.47			
ICTL3	0.21	0.23	0.28	0.32		
ICTT1	0.22	0.21	0.27	0.25	0.41	
ICTT2	0.22	0.23	0.27	0.23	0.33	0.48
ICTT3	0.23	0.20	0.29	0.24	0.26	0.31
ICTD1	0.21	0.19	0.24	0.22	0.27	0.30
ICTD2	0.20	0.21	0.24	0.22	0.31	0.35
ICTD3	0.23	0.18	0.27	0.19	0.30	0.38

## Covariance Matrix

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	0.41			
ICTD1	0.29	0.36		
ICTD2	0.28	0.29	0.45	
ICTD3	0.30	0.29	0.42	0.67

TI

## Parameter Specifications

## LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	0	0	0	0	0
KICT2	1	0	0	0	0
KICT3	2	0	0	0	0
KICT4	3	0	0	0	0
ICTC1	0	0	0	0	0
ICTC2	0	4	0	0	0
ICTC3	0	5	0	0	0

ICTL1	0	0	0	0	0
ICTL2	0	0	6	0	0
ICTL3	0	0	7	0	0
ICTT1	0	0	0	0	0
ICTT2	0	0	0	8	0
ICTT3	0	0	0	9	0
ICTD1	0	0	0	0	0
ICTD2	0	0	0	0	10
ICTD3	0	0	0	0	11

## GAMMA

## AICT

KICT	12
ICTC	13
ICTL	14
ICTT	15
ICTD	16

## PSI

KICT	ICTC	ICTL	ICTT	ICTD
17	18	19	20	21

## THETA-EPS

KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2	
22						
KICT2	23	24				
KICT3	25	0	26			
KICT4	27	28	0	29		
ICTC1	30	31	32	33	34	
ICTC2	35	36	37	38	39	40
ICTC3	41	42	43	44	0	0
ICTL1	0	0	0	0	46	0
ICTL2	0	0	0	0	0	48

ICTL3	0	0	51	0	52	0
ICTT1	0	0	0	0	0	0
ICTT2	0	0	0	58	59	0
ICTT3	65	66	0	0	67	0
ICTD1	71	0	0	72	73	74
ICTD2	79	0	0	0	0	0
ICTD3	0	0	84	0	85	0

## THETA-EPS

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	45					
ICTL1	0	47				
ICTL2	49	0	50			
ICTL3	53	0	54	55		
ICTT1	0	0	0	56	57	
ICTT2	60	0	61	62	63	64
ICTT3	68	0	0	0	69	0
ICTD1	75	76	77	0	0	0
ICTD2	0	0	80	0	81	82
ICTD3	0	86	87	88	89	90

## THETA-EPS

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	70			
ICTD1	0	78		
ICTD2	0	0	83	
ICTD3	0	91	92	93

TI

Number of Iterations = 13

LISREL Estimates (Maximum Likelihood)

LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	0.59	--	--	--	--
KICT2	0.61 (0.02) 28.39	--	--	--	--
KICT3	0.47 (0.03) 18.57	--	--	--	--
KICT4	0.55 (0.03) 19.90	--	--	--	--
ICTC1	--	0.51	--	--	--
ICTC2	--	0.62 (0.03) 23.15	--	--	--
ICTC3	--	0.56 (0.03) 19.78	--	--	--
ICTL1	--	--	0.45	--	--
ICTL2	--	--	0.63 (0.05) 13.94	--	--
ICTL3	--	--	0.50 (0.04) 13.59	--	--
ICTT1	--	--	--	0.50	--



ICTT2	--	--	--	0.56	--
				(0.03)	
				20.67	

ICTT3	--	--	--	0.53	--
				(0.03)	
				17.85	

ICTD1	--	--	--	--	0.55
-------	----	----	----	----	------

ICTD2	--	--	--	--	0.53
				(0.03)	
				20.22	

ICTD3	--	--	--	--	0.59
				(0.04)	
				15.20	

GAMMA

AICT

-----

KICT	0.85
	(0.04)
	22.10

ICTC	0.80
	(0.05)
	16.26

ICTL	0.88
	(0.07)
	12.30

ICTT	1.00
	(0.06)
	18.14

ICTD	0.95
	(0.04)

21.94

Covariance Matrix of ETA and KSI

	KICT	ICTC	ICTL	ICTT	ICTD	AICT
KICT	1.00					
ICTC	0.67	1.00				
ICTL	0.74	0.70	1.00			
ICTT	0.85	0.80	0.88	1.00		
ICTD	0.81	0.76	0.83	0.95	1.00	
AICT	0.85	0.80	0.88	1.00	0.95	1.00

PHI

AICT

1.00

PSI

Note: This matrix is diagonal.

KICT	ICTC	ICTL	ICTT	ICTD
0.28	0.37	0.23	0.00	0.09
(0.04)	(0.05)	(0.04)	(0.02)	(0.03)
6.85	7.80	5.61	0.00	3.73

Squared Multiple Correlations for Structural Equations

KICT	ICTC	ICTL	ICTT	ICTD
0.72	0.63	0.77	1.00	0.91

Squared Multiple Correlations for Reduced Form

KICT	ICTC	ICTL	ICTT	ICTD
0.72	0.63	0.77	1.00	0.91

## THETA-EPS

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	-0.02 (0.01) -1.64					
KICT2	-0.06 (0.01) -4.71	0.03 (0.01) 2.73				
KICT3	-0.04 (0.01) -5.63	--	0.12 (0.01) 11.59			
KICT4	-0.07 (0.01) -6.14	-0.04 (0.01) -3.53	--	0.12 (0.02) 7.75		
ICTC1	0.02 (0.01) 3.48	0.07 (0.01) 7.43	0.06 (0.01) 5.93	0.07 (0.01) 6.41	0.07 (0.01) 6.34	
ICTC2	0.07 (0.01) 11.82	0.14 (0.01) 11.58	0.10 (0.01) 8.29	0.09 (0.01) 7.39	-0.02 (0.01) -2.18	0.08 (0.01) 5.31
ICTC3	0.04 (0.01) 4.65	0.13 (0.01) 9.94	0.08 (0.01) 6.37	0.05 (0.01) 4.23	--	--
ICTL1	--	--	--	-- (0.01) 3.30	0.03	--

ICTL2	--	--	--	--	--	0.01
					(0.00)	
					2.15	
ICTL3	--	--	0.00	--	0.03	--
		(0.01)		(0.01)		
		-0.30		5.63		
ICTT1	--	--	--	--	--	--
ICTT2	--	--	--	0.02	-0.02	--
			(0.01)	(0.01)		
			2.47	-2.12		
ICTT3	0.06	0.00	--	--	-0.01	--
	(0.01)	(0.00)			(0.01)	
	11.45	-0.88			-2.12	
ICTD1	0.01	--	--	-0.02	-0.01	-0.01
	(0.00)			(0.01)	(0.01)	(0.00)
	4.38			-3.65	-0.82	-3.00
ICTD2	0.01	--	--	--	--	--
	(0.00)					
	2.80					
ICTD3	--	--	-0.03	--	-0.02	--
		(0.01)		(0.01)		
		-3.39		-2.88		

## THETA-EPS

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	0.10					
	(0.01)					
	8.17					

ICTL1	--	0.25				
		(0.02)				
		12.95				
ICTL2	-0.02	--	0.07			
	(0.01)		(0.02)			
	-2.25		3.67			
ICTL3	0.02	--	-0.04	0.07		
	(0.01)		(0.01)	(0.01)		
	2.99		-3.10	5.23		
ICTT1	--	--	--	0.03	0.16	
				(0.01)	(0.01)	
				4.38	12.23	
ICTT2	-0.02	--	-0.03	-0.02	0.05	0.16
	(0.01)		(0.01)	(0.01)	(0.01)	(0.01)
	-2.88		-3.70	-2.18	4.23	11.63
ICTT3	0.00	--	--	--	-0.01	--
	(0.01)				(0.00)	
	-0.55				-2.46	
ICTD1	-0.02	-0.01	-0.05	--	--	--
	(0.01)	(0.01)	(0.01)			
	-3.67	-1.51	-6.11			
ICTD2	--	--	-0.04	--	0.06	0.06
			(0.01)	(0.01)	(0.01)	
			-3.93	5.78	5.44	
ICTD3	--	-0.04	-0.04	-0.05	0.02	0.06
		(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
		-2.68	-2.74	-4.94	1.14	3.91

THETA-EPS

ICTT3 ICTD1 ICTD2 ICTD3

ICTT3	0.12			
	(0.01)			
	11.47			
ICTD1	--	0.05		
		(0.01)		
		5.72		
ICTD2	--	--	0.17	
			(0.01)	
			11.96	
ICTD3	--	-0.04	0.11	0.32
		(0.01)	(0.02)	(0.03)
		-4.01	6.09	10.72

Squared Multiple Correlations for Y – Variables

KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
1.08	0.93	0.65	0.73	0.79	0.83

Squared Multiple Correlations for Y – Variables

ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
0.76	0.45	0.85	0.79	0.60	0.66

Squared Multiple Correlations for Y – Variables

ICTT3	ICTD1	ICTD2	ICTD3
0.70	0.85	0.63	0.52

## Goodness of Fit Statistics

Degrees of Freedom = 43

Minimum Fit Function Chi-Square = 41.76 (P = 0.53)

Normal Theory Weighted Least Squares Chi-Square = 41.20 (P = 0.55)

Estimated Non-centrality Parameter (NCP) = 0.0

90 Percent Confidence Interval for NCP = (0.0 ; 17.18)

Minimum Fit Function Value = 0.10

Population Discrepancy Function Value (F0) = 0.0

90 Percent Confidence Interval for F0 = (0.0 ; 0.043)

Root Mean Square Error of Approximation (RMSEA) = 0.0

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) = 0.57

90 Percent Confidence Interval for ECVI = (0.57 ; 0.62)

ECVI for Saturated Model = 0.68

ECVI for Independence Model = 46.38

Chi-Square for Independence Model with 120 Degrees of Freedom = 18520.96

Independence AIC = 18552.96

Model AIC = 227.20

Saturated AIC = 272.00

Independence CAIC = 18632.87

Model CAIC = 691.64

Saturated CAIC = 951.18

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.36

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.99

Critical N (CN) = 647.15

Root Mean Square Residual (RMR) = 0.0077

Standardized RMR = 0.018

Goodness of Fit Index (GFI) = 0.99

Adjusted Goodness of Fit Index (AGFI) = 0.96

Parsimony Goodness of Fit Index (PGFI) = 0.31

TI

Fitted Covariance Matrix

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	0.32					
KICT2	0.30	0.40				
KICT3	0.23	0.29	0.34			
KICT4	0.26	0.30	0.26	0.42		
ICTC1	0.22	0.28	0.22	0.26	0.33	
ICTC2	0.32	0.39	0.30	0.32	0.29	0.46
ICTC3	0.26	0.36	0.26	0.26	0.28	0.35
ICTL1	0.20	0.21	0.16	0.19	0.19	0.20
ICTL2	0.28	0.29	0.22	0.26	0.22	0.28
ICTL3	0.22	0.23	0.17	0.20	0.21	0.21
ICTT1	0.25	0.26	0.20	0.23	0.20	0.25
ICTT2	0.28	0.29	0.23	0.28	0.21	0.28
ICTT3	0.33	0.27	0.21	0.25	0.20	0.26
ICTD1	0.27	0.27	0.21	0.22	0.21	0.24
ICTD2	0.26	0.26	0.20	0.24	0.20	0.25
ICTD3	0.28	0.29	0.19	0.26	0.20	0.28

Fitted Covariance Matrix

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	0.41					
ICTL1	0.18	0.46				
ICTL2	0.23	0.29	0.47			
ICTL3	0.21	0.23	0.27	0.32		
ICTT1	0.22	0.20	0.28	0.25	0.41	
ICTT2	0.23	0.22	0.28	0.23	0.33	0.48



ICTT3	0.23	0.21	0.30	0.23	0.26	0.30
ICTD1	0.21	0.20	0.25	0.23	0.26	0.30
ICTD2	0.22	0.20	0.25	0.22	0.31	0.34
ICTD3	0.25	0.18	0.27	0.19	0.30	0.38

## Fitted Covariance Matrix

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	0.41			
ICTD1	0.28	0.36		
ICTD2	0.27	0.29	0.45	
ICTD3	0.30	0.29	0.42	0.67

## Fitted Residuals

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	0.00					
KICT2	0.00	0.00				
KICT3	0.00	0.00	0.00			
KICT4	0.00	0.00	0.00	0.00		
ICTC1	0.00	0.00	0.00	0.00	0.00	
ICTC2	0.00	0.00	0.00	0.00	0.00	0.00
ICTC3	0.00	0.00	0.00	0.00	0.00	0.00
ICTL1	-0.01	0.01	0.01	0.02	0.01	0.01
ICTL2	0.00	0.01	0.01	0.01	0.02	0.02
ICTL3	0.01	0.00	0.00	0.00	0.00	0.00
ICTT1	0.00	0.00	-0.01	-0.01	0.00	-0.01
ICTT2	0.00	-0.01	-0.01	-0.01	-0.01	-0.02
ICTT3	0.00	0.00	-0.01	-0.01	0.00	0.00
ICTD1	0.00	0.00	0.00	0.00	-0.01	0.00
ICTD2	0.00	-0.02	-0.02	0.00	-0.02	-0.02
ICTD3	0.00	-0.01	-0.01	0.00	-0.01	-0.01

## Fitted Residuals

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	0.00					
ICTL1	0.02	0.00				
ICTL2	0.02	0.00	0.00			
ICTL3	0.00	0.01	0.00	0.00		
ICTT1	0.00	0.01	-0.01	0.00	0.00	
ICTT2	-0.01	0.00	0.00	0.00	0.00	0.00
ICTT3	0.00	-0.02	-0.01	0.01	0.00	0.01
ICTD1	0.00	-0.01	0.00	0.00	0.00	0.00
ICTD2	-0.02	0.00	0.00	0.00	0.00	0.00
ICTD3	-0.02	0.00	0.00	0.00	0.00	0.00

## Fitted Residuals

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	0.00			
ICTD1	0.01	0.00		
ICTD2	0.01	0.00	0.00	
ICTD3	0.00	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

-2218  
 -201  
 -1817225  
 -16177  
 -1410  
 -1216  
 -101986542

- 8|65041  
 - 6|40  
 - 4|733119866320  
 - 2|86443187754433321000  
 - 0|85432100988766544322111000  
 0|1112223347803355779  
 2|33345511234889  
 4|334501256  
 6|  
 8|8  
 10|5  
 12|9258  
 14|11435  
 16|  
 18|283

## Standardized Residuals

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	-0.31					
KICT2	-0.59	0.54				
KICT3	-1.07	-0.53	-0.88			
KICT4	-1.14	-1.33	-0.18	-1.54		
ICTC1	-0.17	-0.51	0.08	-0.19	0.00	
ICTC2	-0.60	-0.01	-0.87	-1.08	0.13	-0.08
ICTC3	-0.03	-1.13	-1.05	-1.83	-0.59	-0.43
ICTL1	-1.61	0.64	1.32	1.61	1.86	0.89
ICTL2	-0.77	2.10	1.63	1.48	2.38	1.98
ICTL3	1.30	-0.37	-0.01	-0.50	0.22	-0.02
ICTT1	0.29	-0.30	-0.64	-1.36	-0.08	-0.61
ICTT2	-0.31	-1.88	-1.07	-1.32	-1.76	-1.95
ICTT3	-0.28	-0.67	-0.86	-0.97	-0.08	-0.60
ICTD1	0.96	-0.54	-0.46	-0.59	-1.28	-0.65
ICTD2	0.18	-2.79	-2.18	-0.29	-2.14	-2.10
ICTD3	0.04	-1.06	-1.38	0.06	-1.42	-0.56

## Standardized Residuals

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	-1.37					
ICTL1	1.33	0.96				
ICTL2	2.91	0.54	0.54			
ICTL3	0.39	0.84	1.15	1.16		
ICTT1	0.03	1.44	-0.73	0.62	-0.28	
ICTT2	-2.05	0.27	-0.89	-0.16	0.05	0.69
ICTT3	0.01	-1.88	-1.94	1.81	0.82	1.09
ICTD1	-0.79	-2.03	-1.77	-0.98	0.81	1.19
ICTD2	-2.74	0.40	-0.52	-0.03	0.55	1.76
ICTD3	-1.66	0.03	-0.36	-0.13	-0.03	0.85

## Standardized Residuals

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	0.29			
ICTD1	1.38	0.80		
ICTD2	2.25	0.49	1.18	
ICTD3	0.44	0.83	0.87	0.55

## Summary Statistics for Standardized Residuals

Smallest Standardized Residual = -2.79

Median Standardized Residual = -0.17

Largest Standardized Residual = 2.91

## Stemleaf Plot

```

- 2|87
- 2|21100
- 1|9999888765
- 1|444433311111000
- 0|999988777666666655555
- 0|4443333322221111000000000000
0|1122333444

```

015556666788888999

11001222233344

11566889

210124

219

Largest Negative Standardized Residuals

Residual for ICTD2 and KICT2 -2.79

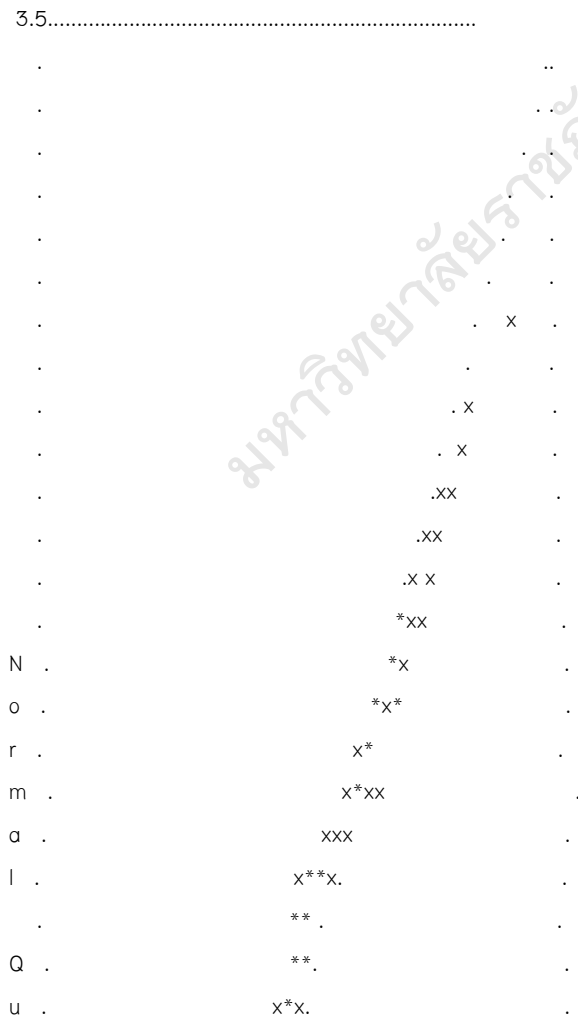
Residual for ICTD2 and ICTC3 -2.74

Largest Positive Standardized Residuals

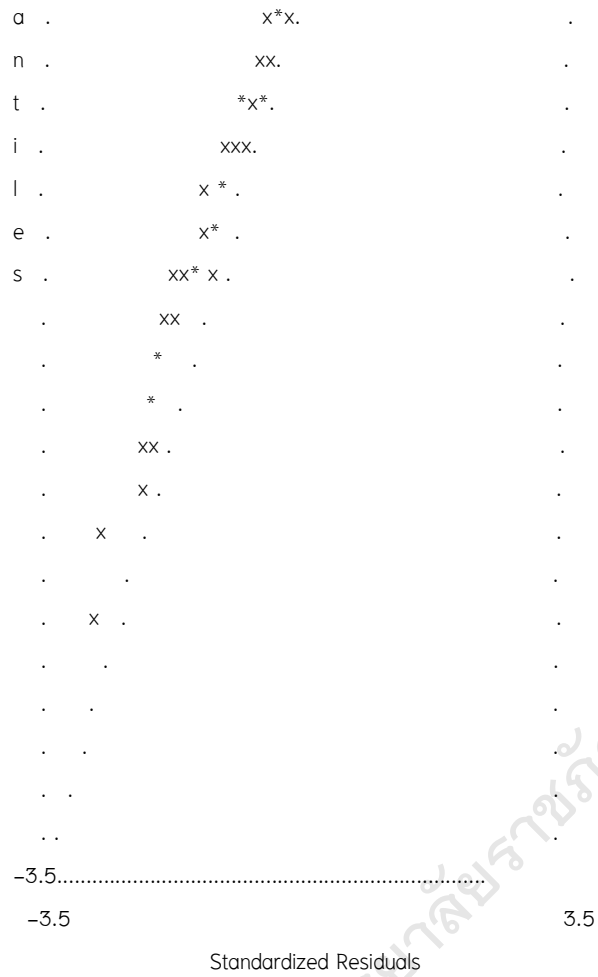
Residual for ICTL2 and ICTC3 2.91

TI

Qplot of Standardized Residuals



มหาวิทยาลัยราชภัฏสุราษฎร์ธานี



TI

Modification Indices and Expected Change

Modification Indices for LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	--	--	0.04	--	0.00
KICT2	--	0.09	0.03	0.09	0.01
KICT3	--	--	0.50	--	0.21
KICT4	--	0.09	0.07	0.09	0.14
ICTC1	0.05	--	0.36	0.05	0.01
ICTC2	0.05	--	0.01	0.05	0.00
ICTC3	--	--	0.61	--	0.45

ICTL1	1.07	1.43	--	--	0.08
ICTL2	0.26	0.51	--	0.02	0.02
ICTL3	0.13	0.08	--	0.02	0.49
ICTT1	0.22	0.28	0.10	--	0.18
ICTT2	0.56	1.16	0.02	--	0.00
ICTT3	1.38	0.05	0.02	--	0.42
ICTD1	1.72	--	2.25	--	--
ICTD2	0.26	0.28	0.21	--	--
ICTD3	0.04	0.01	--	--	--

## Expected Change for LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	--	--	-0.01	--	0.00
KICT2	--	0.03	0.00	0.02	0.01
KICT3	--	--	0.04	--	-0.05
KICT4	--	-0.03	0.01	-0.02	0.02
ICTC1	0.01	--	0.02	0.01	0.00
ICTC2	-0.02	--	0.00	-0.01	0.00
ICTC3	--	--	0.07	--	-0.09
ICTL1	-0.02	0.03	--	--	0.06
ICTL2	0.01	0.03	--	-0.02	-0.02
ICTL3	0.00	-0.01	--	0.01	-0.05
ICTT1	-0.01	0.01	-0.02	--	0.05
ICTT2	0.02	-0.02	-0.01	--	0.01
ICTT3	-0.05	0.01	0.01	--	0.07
ICTD1	0.06	--	-0.08	--	--
ICTD2	-0.01	-0.01	0.03	--	--
ICTD3	0.00	0.00	--	--	--

## Standardized Expected Change for LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	--	--	-0.01	--	0.00
KICT2	--	0.03	0.00	0.02	0.01
KICT3	--	--	0.04	--	-0.05
KICT4	--	-0.03	0.01	-0.02	0.02

ICTC1	0.01	--	0.02	0.01	0.00
ICTC2	-0.02	--	0.00	-0.01	0.00
ICTC3	--	--	0.07	--	-0.09
ICTL1	-0.02	0.03	--	--	0.06
ICTL2	0.01	0.03	--	-0.02	-0.02
ICTL3	0.00	-0.01	--	0.01	-0.05
ICTT1	-0.01	0.01	-0.02	--	0.05
ICTT2	0.02	-0.02	-0.01	--	0.01
ICTT3	-0.05	0.01	0.01	--	0.07
ICTD1	0.06	--	-0.08	--	--
ICTD2	-0.01	-0.01	0.03	--	--
ICTD3	0.00	0.00	--	--	--

Completely Standardized Expected Change for LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	--	--	-0.01	--	0.00
KICT2	--	0.05	-0.01	0.04	0.01
KICT3	--	--	0.07	--	-0.09
KICT4	--	-0.04	0.02	-0.03	0.04
ICTC1	0.02	--	0.04	0.02	-0.01
ICTC2	-0.02	--	0.00	-0.02	0.00
ICTC3	--	--	0.10	--	-0.14
ICTL1	-0.03	0.04	--	--	0.09
ICTL2	0.02	0.05	--	-0.02	-0.03
ICTL3	0.01	-0.01	--	0.02	-0.09
ICTT1	-0.01	0.01	-0.04	--	0.08
ICTT2	0.02	-0.04	-0.02	--	0.01
ICTT3	-0.08	0.01	0.01	--	0.12
ICTD1	0.10	--	-0.13	--	--
ICTD2	-0.02	-0.01	0.05	--	--
ICTD3	0.01	0.00	--	--	--

Modification Indices for BETA

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	--	--	0.00	--	0.09



ICTC	--	--	0.75	--	0.27
ICTL	0.00	0.75	--	--	1.26
ICTT	0.11	0.06	0.01	--	0.75
ICTD	0.09	0.27	1.26	--	--

## Expected Change for BETA

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	--	--	0.00	--	0.03
ICTC	--	--	0.05	--	-0.07
ICTL	0.00	0.03	--	--	-0.25
ICTT	-0.01	-0.01	-0.01	--	0.15
ICTD	0.01	-0.02	-0.10	--	--

## Standardized Expected Change for BETA

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	--	--	0.00	--	0.03
ICTC	--	--	0.05	--	-0.07
ICTL	0.00	0.03	--	--	-0.25
ICTT	-0.01	-0.01	-0.01	--	0.15
ICTD	0.01	-0.02	-0.10	--	--

## No Non-Zero Modification Indices for GAMMA

## No Non-Zero Modification Indices for PHI

## Modification Indices for PSI

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	--				
ICTC	--	--			
ICTL	0.00	0.75	--		
ICTT	0.11	0.06	0.01	--	
ICTD	0.09	0.27	1.26	0.75	--

## Expected Change for PSI

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	--				
ICTC	--	--			
ICTL	0.00	0.01	--		
ICTT	0.00	0.00	0.00	--	
ICTD	0.00	-0.01	-0.02	0.01	--

## Standardized Expected Change for PSI

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	--				
ICTC	--	--			
ICTL	0.00	0.01	--		
ICTT	0.00	0.00	0.00	--	
ICTD	0.00	-0.01	-0.02	0.01	--

## Modification Indices for THETA-EPS

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	--					
KICT2	--	--				
KICT3	--	0.09	--			
KICT4	--	--	0.09	--		
ICTC1	--	--	--	--	--	
ICTC2	--	--	--	--	--	--
ICTC3	--	--	--	--	0.05	0.05
ICTL1	1.26	0.58	0.58	0.71	--	0.74
ICTL2	0.35	1.17	0.04	0.62	0.64	--
ICTL3	1.17	0.53	--	0.55	--	0.10
ICTT1	0.35	0.26	0.00	2.21	0.17	0.06
ICTT2	0.69	0.00	0.16	--	--	1.16
ICTT3	--	--	0.25	0.90	--	0.05
ICTD1	--	0.56	0.17	--	--	--
ICTD2	--	0.60	1.09	2.20	0.93	0.01

ICTD3	0.00	0.08	--	0.00	--	0.39
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## Modification Indices for THETA-EPS

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	--					
ICTL1	0.61	--				
ICTL2	--	0.02	--			
ICTL3	--	0.02	--	--		
ICTT1	0.04	1.90	1.79	--	--	
ICTT2	--	0.02	--	--	--	--
ICTT3	--	0.00	0.17	0.27	--	--
ICTD1	--	--	--	2.25	0.18	0.00
ICTD2	0.00	0.08	--	0.08	--	--
ICTD3	0.54	--	--	--	--	--

## Modification Indices for THETA-EPS

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	--			
ICTD1	0.06	--		
ICTD2	2.93	--	--	
ICTD3	0.22	--	--	--

## Expected Change for THETA-EPS

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	--					
KICT2	--	--				
KICT3	--	0.00	--			
KICT4	--	--	0.00	--		
ICTC1	--	--	--	--	--	
ICTC2	--	--	--	--	--	--
ICTC3	--	--	--	--	0.00	0.00
ICTL1	0.00	0.00	0.01	0.01	--	0.01
ICTL2	0.00	0.01	0.00	0.01	0.01	--

ICTL3	0.00	0.00	--	-0.01	--	0.00
ICTT1	0.00	0.00	0.00	-0.01	0.00	0.00
ICTT2	0.00	0.00	0.00	--	--	-0.01
ICTT3	--	--	0.00	-0.01	--	0.00
ICTD1	--	0.00	0.00	--	--	--
ICTD2	--	0.00	-0.01	0.01	-0.01	0.00
ICTD3	0.00	0.00	--	0.00	--	0.00

## Expected Change for THETA-EPS

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	--					
ICTL1	0.01	--				
ICTL2	--	0.00	--			
ICTL3	--	0.00	--	--		
ICTT1	0.00	0.01	-0.01	--	--	
ICTT2	--	0.00	--	--	--	--
ICTT3	--	0.00	0.00	0.00	--	--
ICTD1	--	--	--	-0.01	0.00	0.00
ICTD2	0.00	0.00	--	0.00	--	--
ICTD3	-0.01	--	--	--	--	--

## Expected Change for THETA-EPS

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	--			
ICTD1	0.00	--		
ICTD2	0.01	--	--	
ICTD3	0.00	--	--	--

## Completely Standardized Expected Change for THETA-EPS

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	--					
KICT2	--	--				
KICT3	--	-0.01	--			

KICT4	--	--	0.01	--		
ICTC1	--	--	--	--	--	
ICTC2	--	--	--	--	--	--
ICTC3	--	--	--	--	-0.01	0.01
ICTL1	-0.01	-0.01	0.02	0.02	--	0.01
ICTL2	-0.01	0.01	0.00	0.01	0.02	--
ICTL3	0.01	-0.01	--	-0.01	--	0.00
ICTT1	-0.01	0.00	0.00	-0.03	0.01	0.00
ICTT2	0.01	0.00	0.01	--	--	-0.01
ICTT3	--	--	-0.01	-0.02	--	0.00
ICTD1	--	0.01	0.01	--	--	--
ICTD2	--	-0.01	-0.02	0.02	-0.02	0.00
ICTD3	0.00	0.00	--	0.00	--	0.01

Completely Standardized Expected Change for THETA-EPS

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	--					
ICTL1	0.02	--				
ICTL2	--	0.00	--			
ICTL3	--	0.00	--	--		
ICTT1	0.00	0.03	-0.03	--	--	
ICTT2	--	0.00	--	--	--	--
ICTT3	--	0.00	0.00	0.01	--	--
ICTD1	--	--	--	-0.03	0.01	0.00
ICTD2	0.00	0.01	--	0.01	--	--
ICTD3	-0.01	--	--	--	--	--

Completely Standardized Expected Change for THETA-EPS

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	--			
ICTD1	0.00	--		
ICTD2	0.03	--	--	
ICTD3	-0.01	--	--	--

Maximum Modification Index is 2.93 for Element (15,13) of THETA-EPS

TI

Factor Scores Regressions

ETA

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT	13.00	5.00	0.19	1.13	-0.11	-6.84
ICTC	-6.24	-4.99	-0.30	-0.54	0.69	4.95
ICTL	-0.18	-0.27	0.06	0.05	-0.30	0.09
ICTT	-0.46	-0.09	0.02	0.10	0.02	0.15
ICTD	-1.15	-0.43	0.01	0.12	-0.07	0.48

ETA

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
KICT	-1.66	-0.04	-0.27	0.86	-0.36	0.04
ICTC	2.28	-0.02	0.64	-0.84	0.25	0.32
ICTL	0.25	0.05	0.84	0.80	-0.29	0.20
ICTT	0.21	0.00	0.37	0.05	0.10	0.19
ICTD	0.34	-0.01	0.42	-0.06	0.01	0.00

ETA

	ICTT3	ICTD1	ICTD2	ICTD3
KICT	-6.31	-3.07	0.22	0.13
ICTC	3.10	2.65	-0.35	0.02
ICTL	-0.09	0.45	-0.07	0.17
ICTT	0.43	0.71	-0.09	0.13
ICTD	0.58	1.28	0.05	0.20

TI

Standardized Solution

## LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	0.59	--	--	--	--
KICT2	0.61	--	--	--	--
KICT3	0.47	--	--	--	--
KICT4	0.55	--	--	--	--
ICTC1	--	0.51	--	--	--
ICTC2	--	0.62	--	--	--
ICTC3	--	0.56	--	--	--
ICTL1	--	--	0.45	--	--
ICTL2	--	--	0.63	--	--
ICTL3	--	--	0.50	--	--
ICTT1	--	--	--	0.50	--
ICTT2	--	--	--	0.56	--
ICTT3	--	--	--	0.53	--
ICTD1	--	--	--	--	0.55
ICTD2	--	--	--	--	0.53
ICTD3	--	--	--	--	0.59

## GAMMA

	AICT
KICT	0.85
ICTC	0.80
ICTL	0.88
ICTT	1.00
ICTD	0.95

## Correlation Matrix of ETA and KSI

	KICT	ICTC	ICTL	ICTT	ICTD	AICT
KICT	1.00					
ICTC	0.67	1.00				
ICTL	0.74	0.70	1.00			
ICTT	0.85	0.80	0.88	1.00		

ICTD	0.81	0.76	0.83	0.95	1.00	
AICT	0.85	0.80	0.88	1.00	0.95	1.00

PSI

Note: This matrix is diagonal.

KICT	ICTC	ICTL	ICTT	ICTD
0.28	0.37	0.23	0.00	0.09

TI

Completely Standardized Solution

LAMBDA-Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	1.04	--	--	--	--
KICT2	0.96	--	--	--	--
KICT3	0.81	--	--	--	--
KICT4	0.85	--	--	--	--
ICTC1	--	0.89	--	--	--
ICTC2	--	0.91	--	--	--
ICTC3	--	0.87	--	--	--
ICTL1	--	--	0.67	--	--
ICTL2	--	--	0.92	--	--
ICTL3	--	--	0.89	--	--
ICTT1	--	--	--	0.78	--
ICTT2	--	--	--	0.81	--
ICTT3	--	--	--	0.84	--
ICTD1	--	--	--	--	0.92
ICTD2	--	--	--	--	0.79
ICTD3	--	--	--	--	0.72

GAMMA

AICT

-----



KICT	0.85
ICTC	0.80
ICTL	0.88
ICTT	1.00
ICTD	0.95

Correlation Matrix of ETA and KSI

	KICT	ICTC	ICTL	ICTT	ICTD	AICT
KICT	1.00					
ICTC	0.67	1.00				
ICTL	0.74	0.70	1.00			
ICTT	0.85	0.80	0.88	1.00		
ICTD	0.81	0.76	0.83	0.95	1.00	
AICT	0.85	0.80	0.88	1.00	0.95	1.00

PSI

Note: This matrix is diagonal.

	KICT	ICTC	ICTL	ICTT	ICTD
KICT	0.28				
ICTC	0.37	0.23			
ICTL	0.23	0.00	0.09		
ICTT	0.00			0.09	
ICTD	0.09				0.09

THETA-EPS

	KICT1	KICT2	KICT3	KICT4	ICTC1	ICTC2
KICT1	-0.08					
KICT2	-0.16	0.07				
KICT3	-0.13	--	0.35			
KICT4	-0.19	-0.09	--	0.27		
ICTC1	0.07	0.19	0.18	0.18	0.21	
ICTC2	0.19	0.31	0.25	0.20	-0.06	0.17
ICTC3	0.10	0.31	0.21	0.13	--	--
ICTL1	--	--	--	--	0.07	--
ICTL2	--	--	--	--	--	0.02
ICTL3	--	--	-0.01	--	0.10	--
ICTT1	--	--	--	--	--	--

ICTT2	--	--	--	0.04	-0.04	--
ICTT3	0.18	-0.01	--	--	-0.04	--
ICTD1	0.04	--	--	-0.06	-0.02	-0.04
ICTD2	0.02	--	--	--	--	--
ICTD3	--	--	-0.06	--	-0.05	--

## THETA-EPS

	ICTC3	ICTL1	ICTL2	ICTL3	ICTT1	ICTT2
ICTC3	0.24					
ICTL1	--	0.55				
ICTL2	-0.04	--	0.15			
ICTL3	0.05	--	-0.11	0.21		
ICTT1	--	--	--	0.09	0.40	
ICTT2	-0.04	--	-0.07	-0.04	0.10	0.34
ICTT3	-0.01	--	--	--	-0.03	--
ICTD1	-0.06	-0.03	-0.11	--	--	--
ICTD2	--	--	-0.08	--	0.13	0.13
ICTD3	--	-0.07	-0.07	-0.11	0.03	0.11

## THETA-EPS

	ICTT3	ICTD1	ICTD2	ICTD3
ICTT3	0.30			
ICTD1	--	0.15		
ICTD2	--	--	0.37	
ICTD3	--	-0.08	0.20	0.48

TI

Total and Indirect Effects

Total Effects of X on ETA

	AICT
KICT	0.85

	(0.04)
	22.10
ICTC	0.80
	(0.05)
	16.26
ICTL	0.88
	(0.07)
	12.30
ICTT	1.00
	(0.06)
	18.14
ICTD	0.95
	(0.04)
	21.94

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

Total Effects of ETA on Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	0.59	--	--	--	--
KICT2	0.61	--	--	--	--
	(0.02)				
	28.39				
KICT3	0.47	--	--	--	--
	(0.03)				
	18.57				
KICT4	0.55	--	--	--	--
	(0.03)				
	19.90				

ICTC1	--	0.51	--	--	--
ICTC2	--	0.62	--	--	--
		(0.03)			
		23.15			
ICTC3	--	0.56	--	--	--
		(0.03)			
		19.78			
ICTL1	--	--	0.45	--	--
ICTL2	--	--	0.63	--	--
		(0.05)			
		13.94			
ICTL3	--	--	0.50	--	--
		(0.04)			
		13.59			
ICTT1	--	--	--	0.50	--
ICTT2	--	--	--	0.56	--
				(0.03)	
				20.67	
ICTT3	--	--	--	0.53	--
				(0.03)	
				17.85	
ICTD1	--	--	--	--	0.55
ICTD2	--	--	--	--	0.53
				(0.03)	
				20.22	
ICTD3	--	--	--	--	0.59
				(0.04)	

15.20

Total Effects of X on Y

	AICT
	-----
KICT1	0.50 (0.02) 22.10
KICT2	0.52 (0.03) 19.68
KICT3	0.40 (0.03) 15.25
KICT4	0.47 (0.03) 16.80
ICTC1	0.40 (0.02) 16.26
ICTC2	0.49 (0.03) 16.71
ICTC3	0.44 (0.03) 14.97
ICTL1	0.40 (0.03) 12.30

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ICTL2 0.55  
(0.03)  
19.07

ICTL3 0.44  
(0.02)  
18.23

ICTT1 0.50  
(0.03)  
18.14

ICTT2 0.56  
(0.03)  
19.17

ICTT3 0.53  
(0.03)  
20.39

ICTD1 0.52  
(0.02)  
21.94

ICTD2 0.51  
(0.03)  
17.08

ICTD3 0.56  
(0.04)  
14.69

TI

Standardized Total and Indirect Effects

Standardized Total Effects of X on ETA

AICT

KICT	0.85
ICTC	0.80
ICTL	0.88
ICTT	1.00
ICTD	0.95

## Standardized Total Effects of ETA on Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	0.59	--	--	--	--
KICT2	0.61	--	--	--	--
KICT3	0.47	--	--	--	--
KICT4	0.55	--	--	--	--
ICTC1	--	0.51	--	--	--
ICTC2	--	0.62	--	--	--
ICTC3	--	0.56	--	--	--
ICTL1	--	--	0.45	--	--
ICTL2	--	--	0.63	--	--
ICTL3	--	--	0.50	--	--
ICTT1	--	--	--	0.50	--
ICTT2	--	--	--	0.56	--
ICTT3	--	--	--	0.53	--
ICTD1	--	--	--	--	0.55
ICTD2	--	--	--	--	0.53
ICTD3	--	--	--	--	0.59

## Completely Standardized Total Effects of ETA on Y

	KICT	ICTC	ICTL	ICTT	ICTD
KICT1	1.04	--	--	--	--
KICT2	0.96	--	--	--	--
KICT3	0.81	--	--	--	--
KICT4	0.85	--	--	--	--
ICTC1	--	0.89	--	--	--
ICTC2	--	0.91	--	--	--
ICTC3	--	0.87	--	--	--
ICTL1	--	--	0.67	--	--

ICTL2	--	--	0.92	--	--
ICTL3	--	--	0.89	--	--
ICTT1	--	--	--	0.78	--
ICTT2	--	--	--	0.81	--
ICTT3	--	--	--	0.84	--
ICTD1	--	--	--	--	0.92
ICTD2	--	--	--	--	0.79
ICTD3	--	--	--	--	0.72

## Standardized Total Effects of X on Y

	AICT
	-----
KICT1	0.50
KICT2	0.52
KICT3	0.40
KICT4	0.47
ICTC1	0.40
ICTC2	0.49
ICTC3	0.44
ICTL1	0.40
ICTL2	0.55
ICTL3	0.44
ICTT1	0.50
ICTT2	0.56
ICTT3	0.53
ICTD1	0.52
ICTD2	0.51
ICTD3	0.56

## Completely Standardized Total Effects of X on Y

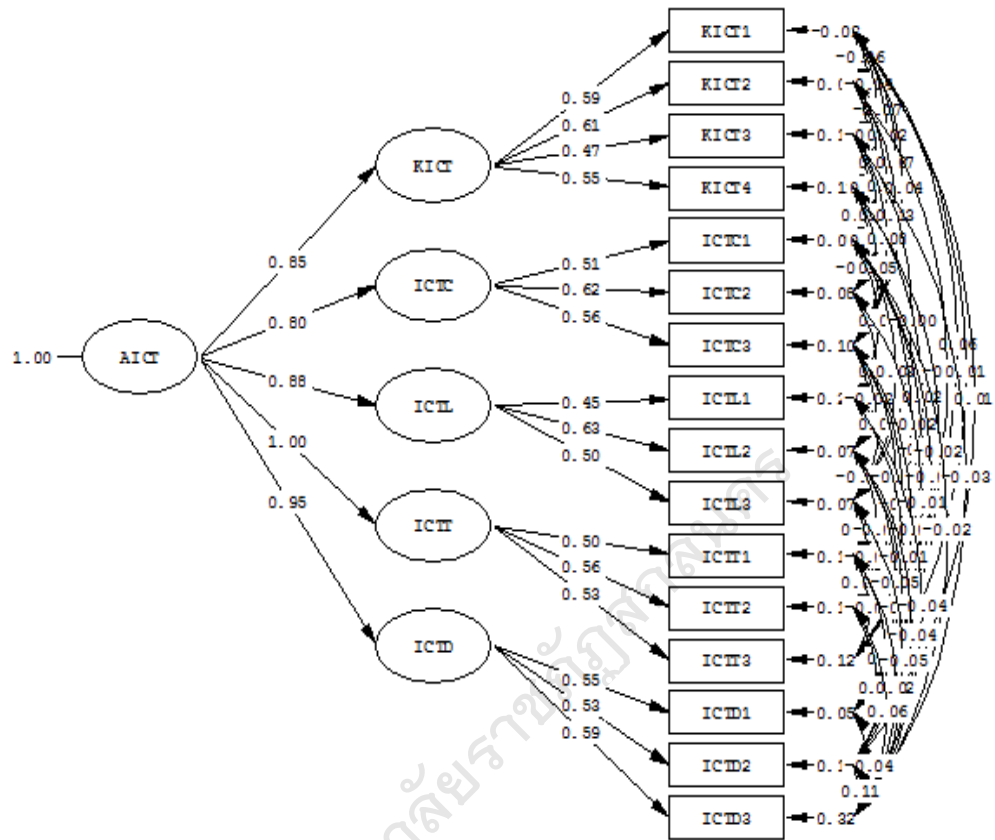
	AICT
	-----
KICT1	0.88
KICT2	0.81
KICT3	0.68
KICT4	0.72
ICTC1	0.71



ICTC2	0.72
ICTC3	0.69
ICTL1	0.59
ICTL2	0.81
ICTL3	0.78
ICTT1	0.78
ICTT2	0.81
ICTT3	0.84
ICTD1	0.88
ICTD2	0.75
ICTD3	0.68

Time used: 0.078 Seconds

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Chi-Square=41.20, df=43, P-value=0.54944, RMSEA=0.000