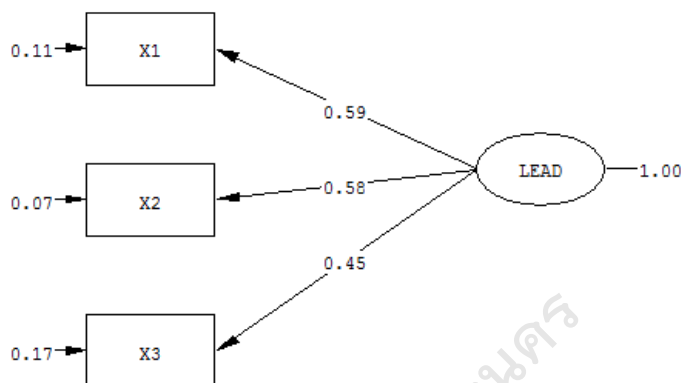


ภาคผนวก จ
ผลการวิเคราะห์องค์ประกอบเชิงยืนยัน
โดยใช้โปรแกรม LISREL

มหาวิทยาลัยราชภัฏวไลยอลงกรณ์

1. ผลการเขียนโปรแกรม(Syntax)และรูปภาพประกอบ(Path Diagram)
การวิเคราะห์องค์ประกอบเชิงยืนยันของรูปแบบการวัดองค์ประกอบด้าน
ภาวะผู้นำทางวิชาการ



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

DATE: 4/ 9/2018

TIME: 14:55

L I S R E L 8.52

BY

Karl G. Jöreskog & Dag Sörbom

This program is published exclusively by

Scientific Software International, Inc.

7383 N. Lincoln Avenue, Suite 100

Lincolnwood, IL 60712, U.S.A.

Phone: (800)247-6113, (847)675-0720, Fax: (847)675-2140

Copyright by Scientific Software International, Inc., 1981-2002

Use of this program is subject to the terms specified in the

Universal Copyright Convention.

Website: www.ssicentral.com

The following lines were read from file C:\LEAD\LEAD.LPJ:

TI LEAD

!DA NI=3 NO=500 NG=1 MA=CM

SY='C:\LEAD\LEAD.dsf' NG=1
 SE
 1 2 3 /
 MO NX=3 NK=1 LX=FU,FI PH=SY,FR TD=DI,FR
 LK
 LEAD
 FR LX(1,1) LX(2,1) LX(3,1)
 PD
 OU ME=ML AM RS EF FS SS SC IT=250

TI LEAD

Covariance Matrix

	X1	X2	X3
X1	0.45		
X2	0.34	0.41	
X3	0.27	0.26	0.38

TI LEAD

Parameter Specifications

LAMBDA-X

LEAD

X1	1
X2	2
X3	3

THETA-DELTA

	X1	X2	X3
	4	5	6

TI LEAD

Number of Iterations = 0

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

LEAD

X1 0.59

(0.03)

23.17

X2 0.58

(0.02)

24.30

X3 0.45

(0.02)

18.32

PHI

LEAD

1.00

THETA-DELTA

X1	X2	X3
----	----	----

0.11	0.07	0.17
------	------	------

(0.01)	(0.01)	(0.01)
--------	--------	--------

8.09	6.24	13.61
------	------	-------

Squared Multiple Correlations for X - Variables

X1	X2	X3
----	----	----

0.77	0.82	0.54
------	------	------

Goodness of Fit Statistics

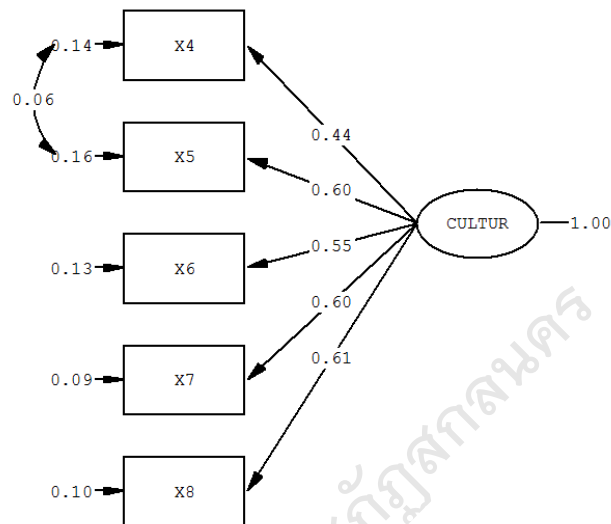
Degrees of Freedom = 0

Minimum Fit Function Chi-Square = 0.0 (P = 1.00)

Normal Theory Weighted Least Squares Chi-Square = 0.00 (P = 1.00)

The Model is Saturated, the Fit is Perfect !

2. ผลการเขียนโปรแกรม(Syntax) และรูปภาพประกอบ(Path Diagram)
การวิเคราะห์องค์ประกอบเชิงยืนยันของรูปแบบการวัดองค์ประกอบด้าน
วัฒนธรรมองค์การ



Chi-Square=2.77, df=4, P-value=0.59645, RMSEA=0.000

DATE: 4/19/2018

TIME: 13:48

L I S R E L 8.52

BY

Karl G. Jöreskog & Dag Sörbom

This program is published exclusively by

Scientific Software International, Inc.

7383 N. Lincoln Avenue, Suite 100

Lincolnwood, IL 60712, U.S.A.

Phone: (800)247-6113, (847)675-0720, Fax: (847)675-2140

Copyright by Scientific Software International, Inc., 1981-2002

Use of this program is subject to the terms specified in the

Universal Copyright Convention.

Website: www.ssicentral.com

The following lines were read from file D:\CULTURE_2\CULTUR.LPJ:

TI CULTUR

!DA NI=5 NO=500 NG=1 MA=CM

SY='D:\CULTURE_2\CULTUR.dsf' NG=1

SE

1 2 3 4 5 /

MO NX=5 NK=1 LX=FU,FI PH=SY,FR TD=SY,FI

LK

CULTUR

FR LX(1,1) LX(2,1) LX(3,1) LX(4,1) LX(5,1)

FR TD 1 1 TD 2 2 TD 3 3 TD 4 4 TD 5 5 TD 2 1

PD

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

TI CULTUR

Number of Iterations = 8

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

CULTUR

X4 0.44

(0.02)

19.68

X5 0.60

(0.03)

22.52

X6 0.55

(0.02)

22.51

X7 0.60

(0.02)

25.27

X8 0.61

(0.02)

24.64

PHI

CULTUR

1.00

THETA-DELTA

	X4	X5	X6	X7	X8
X4	0.14 (0.01) 13.78				
X5	0.06 (0.01) 6.81	0.16 (0.01) 12.69			
X6	--	--	0.13 (0.01) 12.82		
X7	--	--	--	0.09 (0.01) 10.36	
X8	--	--	--	--	0.10 (0.01) 11.11

Squared Multiple Correlations for X – Variables

X4	X5	X6	X7	X8
0.59	0.70	0.70	0.80	0.78

Goodness of Fit Statistics

Degrees of Freedom = 4

Minimum Fit Function Chi-Square = 2.79 (P = 0.59)

Normal Theory Weighted Least Squares Chi-Square = 2.77 (P = 0.60)

Estimated Non-centrality Parameter (NCP) = 0.0

90 Percent Confidence Interval for NCP = (0.0 ; 6.53)

Minimum Fit Function Value = 0.0056

Population Discrepancy Function Value (FO) = 0.0

90 Percent Confidence Interval for FO = (0.0 ; 0.013)

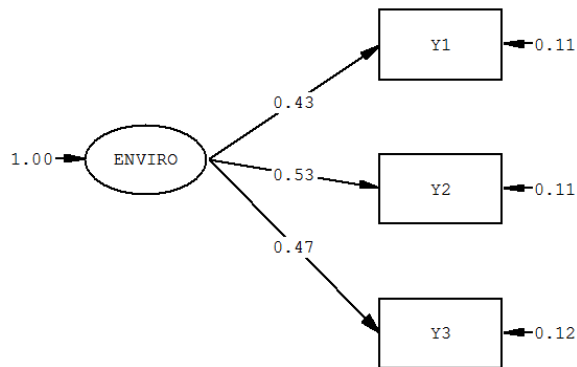
Root Mean Square Error of Approximation (RMSEA) = 0.0

90 Percent Confidence Interval for RMSEA = (0.0 ; 0.057)

P-Value for Test of Close Fit (RMSEA < 0.05) = 0.92

Expected Cross-Validation Index (ECVI) = 0.052
90 Percent Confidence Interval for ECVI = (0.052 ; 0.065)
ECVI for Saturated Model = 0.060
ECVI for Independence Model = 5.30
Chi-Square for Independence Model with 10 Degrees of Freedom = 2633.06
Independence AIC = 2643.06
Model AIC = 24.77
Saturated AIC = 30.00
Independence CAIC = 2669.13
Model CAIC = 82.13
Saturated CAIC = 108.22
Normed Fit Index (NFI) = 1.00
Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.40
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 1.00
Critical N (CN) = 2376.37
Root Mean Square Residual (RMR) = 0.0018
Standardized RMR = 0.0045
Goodness of Fit Index (GFI) = 1.00
Adjusted Goodness of Fit Index (AGFI) = 0.99
Parsimony Goodness of Fit Index (PGFI) = 0.27

3. ผลการเขียนโปรแกรม(Syntax) และรูปภาพประกอบ(Path Diagram) การวิเคราะห์องค์ประกอบเชิงยืนยันของรูปแบบการวัดองค์ประกอบด้านบรรยากาศโรงเรียน



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

DATE: 4/17/2018

TIME: 15:43

L I S R E L 8.52

BY

Karl G. Jöreskog & Dag Sörbom

This program is published exclusively by

Scientific Software International, Inc.

7383 N. Lincoln Avenue, Suite 100

Lincolnwood, IL 60712, U.S.A.

Phone: (800)247-6113, (847)675-0720, Fax: (847)675-2140

Copyright by Scientific Software International, Inc., 1981-2002

Use of this program is subject to the terms specified in the

Universal Copyright Convention.

Website: www.ssicentral.com

The following lines were read from file D:\ENVIRO\ENVIRO.LPJ:

TI ENVIRO

!DA NI=3 NO=500 NG=1 MA=CM

```

SY='D:\ENVIRO\ENVIRO.dsf' NG=1
SE
1 2 3 /
MO NY=3 NE=1 LY=FU,FI PS=DI,FR TE=SY,FI
LE
ENVIRO
FR LY(1,1) LY(2,1) LY(3,1)
FR TE 1 1 TE 2 2 TE 3 3
PD
OU ME=ML AM RS EF FS SS SC IT=250
TI ENVIRO
Number of Iterations = 0

```

LISREL Estimates (Maximum Likelihood)

```

LAMBDA-Y
      ENVIRO
      -----
Y1      0.43
Y2      0.53
      (0.03)
      18.08

Y3      0.47
      (0.03)
      17.66

```

Covariance Matrix of ETA

```

      ENVIRO
      -----
      1.00
PSI
      ENVIRO
      -----
      1.00
      (0.10)
      9.86

```

THETA-EPS

Y1	Y2	Y3
0.11	0.11	0.12
(0.01)	(0.01)	(0.01)
10.83	8.31	10.62

Squared Multiple Correlations for Y – Variables

Y1	Y2	Y3
0.63	0.72	0.64

Goodness of Fit Statistics

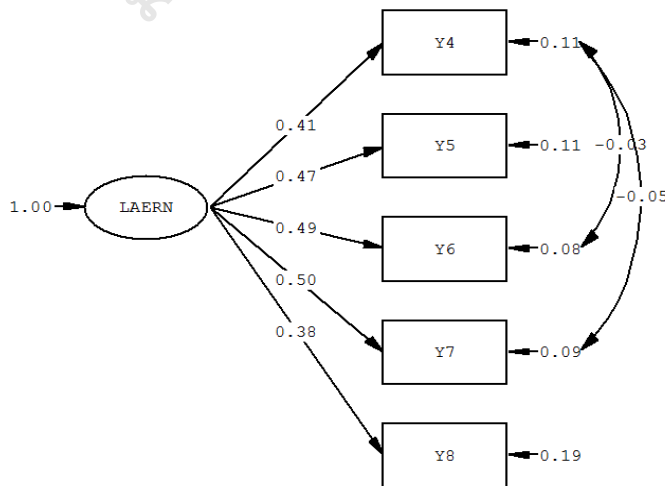
Degrees of Freedom = 0

Minimum Fit Function Chi-Square = 0.0 (P = 1.00)

Normal Theory Weighted Least Squares Chi-Square = 0.00 (P = 1.00)

The Model is Saturated, the Fit is Perfect !

4. ผลการเขียนโปรแกรม(Syntax) และรูปภาพประกอบ(Path Diagram) การวิเคราะห์องค์ประกอบเชิงยืนยันของรูปแบบการวัดองค์ประกอบด้านการจัดกระบวนการเรียนรู้



Chi-Square=4.00, df=3, P-value=0.26129, RMSEA=0.026

DATE: 4/19/2018

TIME: 14:35

L I S R E L 8.52

BY

Karl G. Jöreskog & Dag Sörbom

This program is published exclusively by

Scientific Software International, Inc.

7383 N. Lincoln Avenue, Suite 100

Lincolnwood, IL 60712, U.S.A.

Phone: (800)247-6113, (847)675-0720, Fax: (847)675-2140

Copyright by Scientific Software International, Inc., 1981-2002

Use of this program is subject to the terms specified in the

Universal Copyright Convention.

Website: www.ssicentral.com

The following lines were read from file D:\LEARNLEARN.LPJ:

TI LEARN

!DA NI=5 NO=500 NG=1 MA=CM

SY='D:\LEARNLEARN.dsf' NG=1

SE

1 2 3 4 5 /

MO NY=5 NE=1 LY=FU,FI PS=DI,FR TE=SY,FI

LE

LAERN

FR LY(1,1) LY(2,1) LY(3,1) LY(4,1) LY(5,1)

FR TE 1 1 TE 2 2 TE 3 3 TE 4 4 TE 5 5

FR TE 4 1 TE 3 1

PD

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

TI LEARN

Number of Iterations = 8

LISREL Estimates (Maximum Likelihood)

LAMBDA-Y

LAERN

Y4 0.41

Y5 0.47

(0.03)

16.63

Y6 0.49

(0.03)

17.29

Y7 0.50

(0.03)

16.15

Y8 0.38

(0.03)

13.82

Covariance Matrix of ETA

LAERN

1.00

PSI

LAERN

1.00

(0.11)

9.12

THETA-EPS

Y4 Y5 Y6 Y7 Y8

Y4 0.11

(0.01)

9.55

Y5 -- 0.11

(0.01)

12.53

Y6 -0.03 -- 0.08

(0.01)

(0.01)

-3.39

10.02

Y7 -0.05 -- -- 0.09

	(0.01)		(0.01)	
	-5.76		10.04	
Y8	--	--	--	0.19
			(0.01)	
			14.89	

Squared Multiple Correlations for Y – Variables

Y4	Y5	Y6	Y7	Y8
0.61	0.66	0.74	0.74	0.43

Goodness of Fit Statistics

Degrees of Freedom = 3

Minimum Fit Function Chi-Square = 3.98 (P = 0.26)

Normal Theory Weighted Least Squares Chi-Square = 4.00 (P = 0.26)

Estimated Non-centrality Parameter (NCP) = 1.00

90 Percent Confidence Interval for NCP = (0.0 ; 10.53)

Minimum Fit Function Value = 0.0080

Population Discrepancy Function Value (FO) = 0.0020

90 Percent Confidence Interval for FO = (0.0 ; 0.021)

Root Mean Square Error of Approximation (RMSEA) = 0.026

90 Percent Confidence Interval for RMSEA = (0.0 ; 0.084)

P-Value for Test of Close Fit (RMSEA < 0.05) = 0.68

Expected Cross-Validation Index (ECVI) = 0.056

90 Percent Confidence Interval for ECVI = (0.054 ; 0.075)

ECVI for Saturated Model = 0.060

ECVI for Independence Model = 3.74

Chi-Square for Independence Model with 10 Degrees of Freedom = 1857.38

Independence AIC = 1867.38

Model AIC = 28.00

Saturated AIC = 30.00

Independence CAIC = 1893.45

Model CAIC = 90.58

Saturated CAIC = 108.22

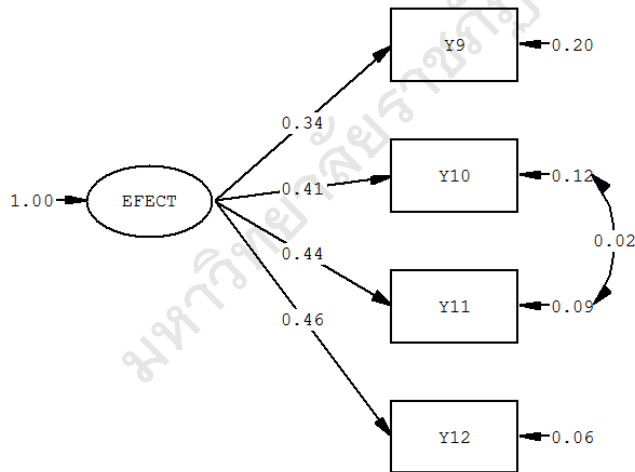
Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00

Parsimony Normed Fit Index (PNFI) = 0.30

Comparative Fit Index (CFI) = 1.00
 Incremental Fit Index (IFI) = 1.00
 Relative Fit Index (RFI) = 0.99
 Critical N (CN) = 1423.60
 Root Mean Square Residual (RMR) = 0.0028
 Standardized RMR = 0.0085
 Goodness of Fit Index (GFI) = 1.00
 Adjusted Goodness of Fit Index (AGFI) = 0.98
 Parsimony Goodness of Fit Index (PGFI) = 0.20

5. ผลการเขียนโปรแกรม(Syntax) และรูปภาพประกอบ(Path Diagram) การวิเคราะห์องค์ประกอบเชิงยืนยันของรูปแบบการวัดองค์ประกอบด้าน ประสิทธิภาพของโรงเรียน



Chi-Square=0.96, df=1, P-value=0.32619, RMSEA=0.000

DATE: 4/19/2018

TIME: 15:37

L I S R E L 8.52

BY

Karl G. Jöreskog & Dag Sörbom

This program is published exclusively by
 Scientific Software International, Inc.
 7383 N. Lincoln Avenue, Suite 100
 Lincolnwood, IL 60712, U.S.A.
 Phone: (800)247-6113, (847)675-0720, Fax: (847)675-2140
 Copyright by Scientific Software International, Inc., 1981-2002
 Use of this program is subject to the terms specified in the
 Universal Copyright Convention.
 Website: www.ssicentral.com
 The following lines were read from file D:\EFECT\EFECT.LPJ:

```

TI EFECT
!DA NI=4 NO=500 NG=1 MA=CM
SY='D:\EFECT\EFECT.ds' NG=1
SE
1 2 3 4 /
MO NY=4 NE=1 LY=FU,FI PS=DI,FR TE=SY,FI
LE
EFECT
FR LY(1,1) LY(2,1) LY(3,1) LY(4,1)
FR TE 1 1 TE 2 2 TE 3 3 TE 4 4
FR TE 3 2
PD
OU ME=ML AM RS EF FS SS SC IT=250
TI EFECT

```

Number of Iterations = 5

LISREL Estimates (Maximum Likelihood)

```

LAMBDA-Y
      EFECT
-----
Y9      0.34
Y10     0.41
        (0.03)
        12.58
Y11     0.44
        (0.03)

```

13.23

Y12 0.46
(0.03)
13.54

Covariance Matrix of ETA

EFFECT

1.00

PSI

EFFECT

1.00
(0.14)
6.98

THETA-EPS

	Y9	Y10	Y11	Y12
Y9	0.20 (0.01) 14.49			
Y10	-- 0.12 (0.01) 9.74			
Y11	-- 0.02 (0.01) 1.99	0.09 (0.01) 7.63		
Y12	-- --	-- --	-- 0.06 (0.01) 5.59	

Squared Multiple Correlations for Y - Variables

Y9	Y10	Y11	Y12
0.36	0.59	0.69	0.78

Goodness of Fit Statistics

Degrees of Freedom = 1

Minimum Fit Function Chi-Square = 0.96 (P = 0.33)
Normal Theory Weighted Least Squares Chi-Square = 0.96 (P = 0.33)
Estimated Non-centrality Parameter (NCP) = 0.0
90 Percent Confidence Interval for NCP = (0.0 ; 6.89)
Minimum Fit Function Value = 0.0019
Population Discrepancy Function Value (FO) = 0.0
90 Percent Confidence Interval for FO = (0.0 ; 0.014)
Root Mean Square Error of Approximation (RMSEA) = 0.0
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.12)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.57
Expected Cross-Validation Index (ECVI) = 0.038
90 Percent Confidence Interval for ECVI = (0.038 ; 0.052)
ECVI for Saturated Model = 0.040
ECVI for Independence Model = 2.26
Chi-Square for Independence Model with 6 Degrees of Freedom = 1119.08
Independence AIC = 1127.08
Model AIC = 18.96
Saturated AIC = 20.00
Independence CAIC = 1147.94
Model CAIC = 65.90
Saturated CAIC = 72.15
Normed Fit Index (NFI) = 1.00
Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.17
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 0.99
Critical N (CN) = 3432.33
Root Mean Square Residual (RMR) = 0.0017
Standardized RMR = 0.0058
Goodness of Fit Index (GFI) = 1.00
Adjusted Goodness of Fit Index (AGFI) = 0.99
Parsimony Goodness of Fit Index (PGFI) = 0.100