

DATE: 1/ 6/2013
TIME: 21:32

L I S R E L 8.54

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:\Users\POLINY\Desktop\Asst. prof.
Sasithorn\LO measurement model\LO MEASUREMENT.SPJ:

MEASUREMENT MODEL OF LO
Observed variable:
LOA LOB LOC LOD LOE QA1 QA2 QA3 KMA KMB KMC KMD
Raw data from file raw.dat
Sample Size = 272
Latent Variables LO
Relationships
LOA = LO
LOB = LO
LOC = LO
LOD = LO
LOE = LO
Set the Error Covariance of LOC and LOB Free
Path Diagram
End of Problem

Sample Size = 272

MEASUREMENT MODEL OF LO

Covariance Matrix

	LOA	LOB	LOC	LOD	LOE
LOA	0.62				
LOB	0.36	0.65			
LOC	0.48	0.55	0.78		
LOD	0.46	0.49	0.61	0.69	
LOE	0.56	0.55	0.70	0.69	1.01

MEASUREMENT MODEL OF LO

Number of Iterations = 6

LISREL Estimates (Maximum Likelihood)

Measurement Equations

LOA = 0.60*LO, Errorvar.= 0.26 , R² = 0.58
(0.041) (0.024)
14.64 10.61

LOB = 0.62*LO, Errorvar.= 0.26 , R_y = 0.60
(0.042) (0.026)
14.78 10.26

LOC = 0.79*LO, Errorvar.= 0.15 , R_y = 0.80
(0.042) (0.018)
18.71 8.35

LOD = 0.77*LO, Errorvar.= 0.092 , R_y = 0.87
(0.039) (0.014)
20.00 6.59

LOE = 0.89*LO, Errorvar.= 0.21 , R_y = 0.79
(0.048) (0.024)
18.46 8.76

Error Covariance for LOC and LOB = 0.054
(0.017)
3.28

Correlation Matrix of Independent Variables

LO

1.00

Goodness of Fit Statistics

Degrees of Freedom = 4
Minimum Fit Function Chi-Square = 6.12 (P = 0.19)
Normal Theory Weighted Least Squares Chi-Square = 6.30 (P = 0.18)
Estimated Non-centrality Parameter (NCP) = 2.30
90 Percent Confidence Interval for NCP = (0.0 ; 13.33)

Minimum Fit Function Value = 0.023
Population Discrepancy Function Value (F0) = 0.0085
90 Percent Confidence Interval for F0 = (0.0 ; 0.049)
Root Mean Square Error of Approximation (RMSEA) = 0.046
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.11)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.46

Expected Cross-Validation Index (ECVI) = 0.10
90 Percent Confidence Interval for ECVI = (0.096 ; 0.15)
ECVI for Saturated Model = 0.11
ECVI for Independence Model = 5.40

Chi-Square for Independence Model with 10 Degrees of Freedom = 1454.02
Independence AIC = 1464.02
Model AIC = 28.30
Saturated AIC = 30.00
Independence CAIC = 1487.05
Model CAIC = 78.96
Saturated CAIC = 99.09

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) = 0.99

Critical N (CN) = 588.53

Root Mean Square Residual (RMR) = 0.0080
Standardized RMR = 0.011
Goodness of Fit Index (GFI) = 0.99

Adjusted Goodness of Fit Index (AGFI) = 0.97
Parsimony Goodness of Fit Index (PGFI) = 0.26

Time used: 0.047 Seconds