

LAMPIRAN 7

HASIL UJI ANALISIS *STRUCTURAL EQUATION MODELING* (SEM)

L I S R E L 8.80

BY

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The following lines were read from file D:\Chinggudeul\Chinggu
Oktober\MUKHTAR\MUKHTAR.pr2:

RAW DATA FROM FILE SKALA4.PSF

LATENT VARIABLES: KP H K L

RELATIONSHIP

KP1 = KP

KP2 = KP

KP3 = KP

KP4 = KP

KP5 = KP

KP6 = KP

H1 = H

H2 = H

H3 = H

H4 = H

H5 = H

K1 = K

K2 = K

K3 = K

L1 = L

L2 = L

L3 = L

L = KP H K

K = KP H

SET ERROR COVARIANCE OF H2 AND H1 FREE

SET ERROR COVARIANCE OF KP2 AND KP1 FREE

SET ERROR COVARIANCE OF KP6 AND KP5 FREE

SET ERROR COVARIANCE OF KP4 AND KP1 FREE

SET ERROR COVARIANCE OF KP3 AND KP2 FREE
 SET ERROR COVARIANCE OF KP4 AND KP3 FREE
 SET ERROR COVARIANCE OF H5 AND H3 FREE
 OPTIONS SC
 PATH DIAGRAM
 END OF PROBLEMS

Sample Size = 160

Covariance Matrix

	K1	K2	K3	L1	L2	L3
K1	0.58					
K2	0.45	0.74				
K3	0.43	0.49	0.82			
L1	0.48	0.63	0.65	1.00		
L2	0.44	0.61	0.60	0.82	1.00	
L3	0.43	0.57	0.55	0.77	0.78	1.00
KP1	0.43	0.59	0.57	0.73	0.76	0.75
KP2	0.44	0.58	0.58	0.73	0.71	0.73
KP3	0.43	0.57	0.52	0.68	0.66	0.72
KP4	0.52	0.60	0.59	0.73	0.70	0.74
KP5	0.46	0.57	0.52	0.71	0.70	0.73
KP6	0.42	0.57	0.55	0.69	0.72	0.72
H1	0.38	0.51	0.43	0.55	0.54	0.53
H2	0.37	0.48	0.39	0.52	0.52	0.51
H3	0.36	0.46	0.42	0.57	0.54	0.55
H4	0.39	0.49	0.40	0.53	0.51	0.50
H5	0.40	0.48	0.45	0.53	0.55	0.50

Covariance Matrix

	KP1	KP2	KP3	KP4	KP5	KP6
KP1	1.00					
KP2	0.88	1.00				
KP3	0.82	0.84	1.00			
KP4	0.78	0.79	0.85	1.00		
KP5	0.78	0.77	0.76	0.83	1.00	
KP6	0.78	0.72	0.70	0.79	0.83	1.00
H1	0.60	0.56	0.53	0.58	0.55	0.59
H2	0.58	0.55	0.49	0.55	0.54	0.54
H3	0.62	0.58	0.55	0.59	0.56	0.59
H4	0.57	0.53	0.50	0.57	0.54	0.56
H5	0.53	0.49	0.49	0.56	0.49	0.52

Covariance Matrix

	H1	H2	H3	H4	H5
H1	0.65				
H2	0.59	0.64			
H3	0.56	0.55	0.74		
H4	0.49	0.48	0.56	0.73	
H5	0.45	0.42	0.43	0.45	0.69

Number of Iterations = 33

LISREL Estimates (Maximum Likelihood)

Measurement Equations

$$K1 = 0.59 * K, \text{ Errorvar.} = 0.23, R^2 = 0.60$$

(0.030)
7.71

$$K2 = 0.74 * K, \text{ Errorvar.} = 0.18, R^2 = 0.75$$

(0.063) (0.029)
11.90 6.25

$$K3 = 0.70 * K, \text{ Errorvar.} = 0.33, R^2 = 0.60$$

(0.068) (0.043)
10.32 7.74

$$L1 = 0.91 * L, \text{ Errorvar.} = 0.18, R^2 = 0.82$$

(0.028)
6.37

$$L2 = 0.90 * L, \text{ Errorvar.} = 0.19, R^2 = 0.81$$

(0.051) (0.029)
17.58 6.58

$$L3 = 0.87 * L, \text{ Errorvar.} = 0.25, R^2 = 0.75$$

(0.054) (0.034)
16.17 7.25

$$KP1 = 0.92 * KP, \text{ Errorvar.} = 0.15, R^2 = 0.85$$

(0.061) (0.025)
15.10 5.92

$$KP2 = 0.88 * KP, \text{ Errorvar.} = 0.23, R^2 = 0.77$$

(0.063) (0.030)
13.97 7.47

$$\text{KP3} = 0.85 * \text{KP}, \text{Errorvar.} = 0.27, R^2 = 0.73$$

(0.064)	(0.035)
13.31	7.90

$$\text{KP4} = 0.92 * \text{KP}, \text{Errorvar.} = 0.16, R^2 = 0.84$$

(0.061)	(0.026)
14.96	6.20

$$\text{KP5} = 0.87 * \text{KP}, \text{Errorvar.} = 0.24, R^2 = 0.76$$

(0.063)	(0.031)
13.80	7.79

$$\text{KP6} = 0.86 * \text{KP}, \text{Errorvar.} = 0.26, R^2 = 0.74$$

(0.064)	(0.033)
13.47	7.91

$$\text{H1} = 0.72 * \text{H}, \text{Errorvar.} = 0.13, R^2 = 0.80$$

(0.050)	(0.019)
14.37	6.74

$$\text{H2} = 0.69 * \text{H}, \text{Errorvar.} = 0.16, R^2 = 0.75$$

(0.051)	(0.022)
13.65	7.19

$$\text{H3} = 0.76 * \text{H}, \text{Errorvar.} = 0.15, R^2 = 0.79$$

(0.054)	(0.024)
14.18	6.38

$$\text{H4} = 0.70 * \text{H}, \text{Errorvar.} = 0.23, R^2 = 0.68$$

(0.056)	(0.030)
12.60	7.86

$$\text{H5} = 0.65 * \text{H}, \text{Errorvar.} = 0.27, R^2 = 0.61$$

(0.057)	(0.035)
11.48	7.72

$$\text{Error Covariance for KP2 and KP1} = 0.056$$

(0.020)
2.74

$$\text{Error Covariance for KP3 and KP2} = 0.086$$

(0.020)
4.31

$$\text{Error Covariance for KP4 and KP1} = -0.07$$

(0.015)
-4.79

Error Covariance for KP4 and KP3 = 0.082
 (0.022)
 3.65

Error Covariance for KP6 and KP5 = 0.088
 (0.025)
 3.52

Error Covariance for H2 and H1 = 0.087
 (0.018)
 4.91

Error Covariance for H5 and H3 = -0.07
 (0.021)
 -3.41

Structural Equations

$K = 0.46 * KP + 0.48 * H$, Errorvar.= 0.17 , $R^2 = 0.83$
 (0.13) (0.13) (0.048)
 3.58 3.75 3.61

$L = 0.58 * K + 0.46 * KP - 0.078 * H$, Errorvar.= 0.13 , $R^2 = 0.87$
 (0.16) (0.13) (0.14) (0.033)
 3.50 3.55 -0.58 3.81

Reduced Form Equations

$K = 0.46 * KP + 0.48 * H$, Errorvar.= 0.17, $R^2 = 0.83$
 (0.13) (0.13)
 3.58 3.75

$L = 0.72 * KP + 0.20 * H$, Errorvar.= 0.18, $R^2 = 0.82$
 (0.12) (0.11)
 6.06 1.78

Correlation Matrix of Independent Variables

	KP	H
KP	1.00	
H	0.88 (0.02) 38.50	1.00

Covariance Matrix of Latent Variables

	K	L	KP	H
K	1.00			
L	0.91	1.00		
KP	0.88	0.90	1.00	
H	0.88	0.84	0.88	1.00

Goodness of Fit Statistics

Degrees of Freedom = 106

Minimum Fit Function Chi-Square = 149.35 (P = 0.0036)

Normal Theory Weighted Least Squares Chi-Square = 138.39 (P = 0.019)

Estimated Non-centrality Parameter (NCP) = 32.39

90 Percent Confidence Interval for NCP = (5.98 ; 66.89)

Minimum Fit Function Value = 0.94

Population Discrepancy Function Value (F0) = 0.20

90 Percent Confidence Interval for F0 = (0.038 ; 0.42)

Root Mean Square Error of Approximation (RMSEA) = 0.044

90 Percent Confidence Interval for RMSEA = (0.019 ; 0.063)

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

Expected Cross-Validation Index (ECVI) = 1.46

90 Percent Confidence Interval for ECVI = (1.30 ; 1.68)

ECVI for Saturated Model = 1.92

ECVI for Independence Model = 63.44

Chi-Square for Independence Model with 136 Degrees of Freedom = 10052.58

Independence AIC = 10086.58

Model AIC = 232.39

Saturated AIC = 306.00

Independence CAIC = 10155.86

Model CAIC = 423.92

Saturated CAIC = 929.50

Normed Fit Index (NFI) = 0.99

Non-Normed Fit Index (NNFI) = 0.99

Parsimony Normed Fit Index (PNFI) = 0.77

Comparative Fit Index (CFI) = 1.00

Incremental Fit Index (IFI) = 1.00

Relative Fit Index (RFI) = 0.98

Critical N (CN) = 153.01

Root Mean Square Residual (RMR) = 0.024

Standardized RMR = 0.029

Goodness of Fit Index (GFI) = 0.91

Adjusted Goodness of Fit Index (AGFI) = 0.87

Parsimony Goodness of Fit Index (PGFI) = 0.63

The Modification Indices Suggest to Add the

Path to	from	Decrease in Chi-Square	New Estimate
K3	L	8.8	0.64

Standardized Solution

LAMBDA-Y

	K	L
K1	0.59	--
K2	0.74	--
K3	0.70	--
L1	--	0.91
L2	--	0.90
L3	--	0.87

LAMBDA-X

	KP	H
KP1	0.92	--
KP2	0.88	--
KP3	0.85	--
KP4	0.92	--
KP5	0.87	--
KP6	0.86	--
H1	--	0.72
H2	--	0.69
H3	--	0.76
H4	--	0.70
H5	--	0.65

BETA

	K	L
K	--	--
L	0.58	--

GAMMA

	KP	H
K	0.46	0.48
L	0.46	-0.08

Correlation Matrix of ETA and KSI

	K	L	KP	H
K	1.00			
L	0.91	1.00		
KP	0.88	0.90	1.00	
H	0.88	0.84	0.88	1.00

PSI

Note: This matrix is diagonal.

	K	L
	0.17	0.13

Regression Matrix ETA on KSI (Standardized)

	KP	H
K	0.46	0.48
L	0.72	0.20

Completely Standardized Solution

LAMBDA-Y

	K	L
K1	0.78	--
K2	0.87	--
K3	0.77	--
L1	--	0.91
L2	--	0.90
L3	--	0.87

LAMBDA-X

	KP	H
KP1	0.92	--
KP2	0.88	--
KP3	0.85	--
KP4	0.92	--
KP5	0.87	--
KP6	0.86	--
H1	--	0.90

H2	--	0.87
H3	--	0.89
H4	--	0.82
H5	--	0.78

BETA

	K	L
K	--	--
L	0.58	--

GAMMA

	KP	H
K	0.46	0.48
L	0.46	-0.08

Correlation Matrix of ETA and KSI

	K	L	KP	H
K	1.00			
L	0.91	1.00		
KP	0.88	0.90	1.00	
H	0.88	0.84	0.88	1.00

PSI

Note: This matrix is diagonal.

	K	L
	0.17	0.13

THETA-EPS

	K1	K2	K3	L1	L2	L3
	0.40	0.25	0.40	0.18	0.19	0.25

THETA-DELTA

	KP1	KP2	KP3	KP4	KP5	KP6
KP1	0.15					
KP2	0.06	0.23				
KP3	--	0.09	0.27			
KP4	-0.07	--	0.08	0.16		
KP5	--	--	--	--	0.24	

KP6	--	--	---	--	0.09	0.26
H1	--	--	---	--	--	--
H2	--	--	---	--	--	--
H3	--	--	---	--	--	--
H4	--	--	---	--	--	--
H5	--	--	---	--	--	--

THETA-DELTA

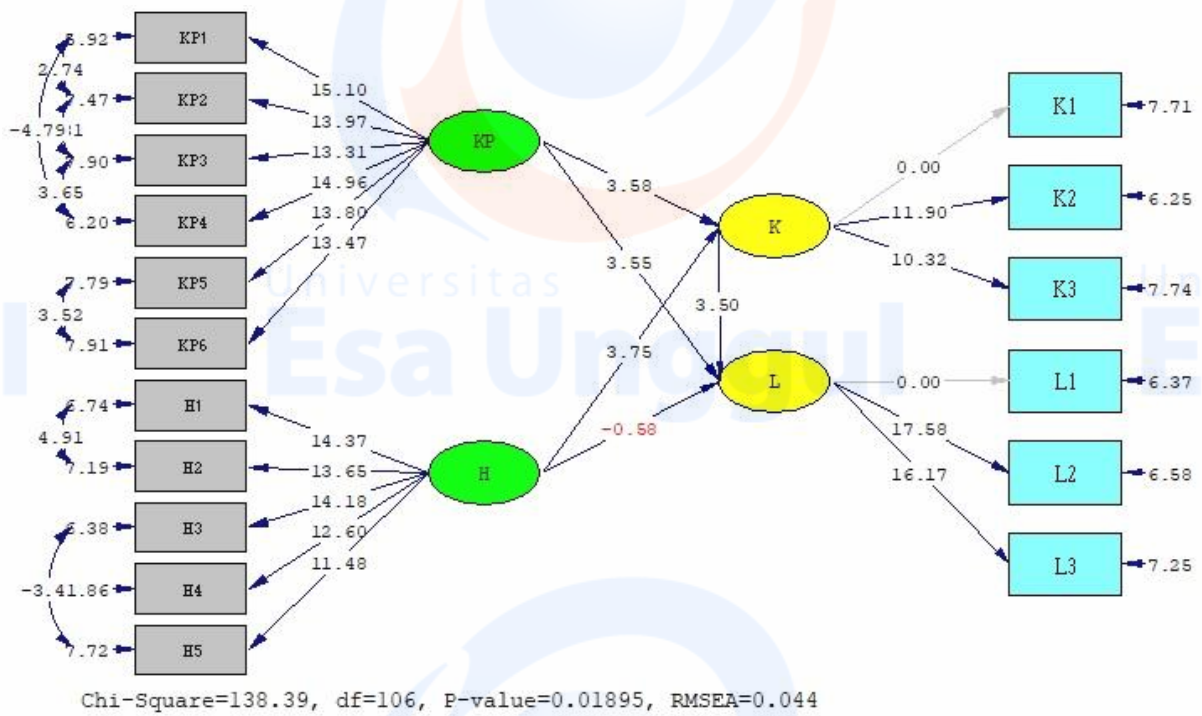
	H1	H2	H3	H4	H5
H1	0.20				
H2	0.13	0.25			
H3	--	--	0.21		
H4	--	--	--	0.32	
H5	--	--	-0.10	--	0.39

Regression Matrix ETA on KSI (Standardized)

	KP	H
K	0.46	0.48
L	0.72	0.20

Time used: 0.062 Seconds

PATH DIAGRAM T-VALUE



PATH DIAGRAM STANDAR SOLUTION

