

HASIL UJI SEM LISREL 8.72

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L I S R E L 8.72

BY

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The following lines were read from file D:\DIVY\DIVY.pr2:

raw data from file DIVY.psf
 latent variables: KP L K

relationships:

KP1 = KP

KP2 = KP

KP3 = KP

KP4 = KP

KP5 = KP

K1 = K

K2 = K

K3 = K

L1 = L

L2 = L

L3 = L

K = KP

L = K KP

set error covariance of KP2 and KP1 free

set error covariance of L3 and L2 free

set error covariance of KP5 and KP2 free

set error covariance of KP4 and K2 free

set error covariance of K3 and L1 free

options sc

path diagram

end of problems

Sample Size = 153

Covariance Matrix

	L1	L2	L3	K1	K2	K3
L1	1.00					
L2	0.77	1.00				
L3	0.63	0.77	1.00			
K1	0.42	0.39	0.32	0.43		
K2	0.42	0.37	0.34	0.25	0.37	
K3	0.50	0.43	0.39	0.28	0.28	0.41
KP1	0.66	0.58	0.50	0.39	0.36	0.35
KP2	0.75	0.67	0.60	0.43	0.44	0.45
KP3	0.69	0.65	0.60	0.41	0.39	0.42
KP4	0.70	0.72	0.64	0.40	0.32	0.39
KP5	0.75	0.73	0.64	0.45	0.40	0.44

Covariance Matrix

	KP1	KP2	KP3	KP4	KP5
KP1	1.00				
KP2	0.83	1.00			
KP3	0.67	0.78	1.00		
KP4	0.60	0.71	0.71	1.00	
KP5	0.70	0.73	0.72	0.80	1.00

Number of Iterations = 21

LISREL Estimates (Maximum Likelihood)

Measurement Equations

$$L1 = 0.89 * L, \text{ Errorvar.} = 0.20, R^2 = 0.80$$

(0.036)
5.50

$$L2 = 0.85 * L, \text{ Errorvar.} = 0.28, R^2 = 0.72$$

(0.059) (0.041)
14.29 6.75

$$L3 = 0.73 * L, \text{ Errorvar.} = 0.46, R^2 = 0.54$$

(0.067) (0.060)
10.94 7.76

$$K1 = 0.51 * K, \text{ Errorvar.} = 0.17, R^2 = 0.60$$

(0.022)
7.58

$$K2 = 0.50 * K, \text{ Errorvar.} = 0.12, R^2 = 0.68$$

(0.045) (0.017)
11.00 6.97

$$K3 = 0.54 * K, \text{ Errorvar.} = 0.12, R^2 = 0.71$$

(0.047) (0.017)
11.37 6.76

$$\text{KP1} = 0.76 * \text{KP}, \text{Errorvar.} = 0.42, R^2 = 0.58$$

(0.070)	(0.053)
10.92	7.98

$$\text{KP2} = 0.89 * \text{KP}, \text{Errorvar.} = 0.20, R^2 = 0.80$$

(0.064)	(0.033)
13.92	6.18

$$\text{KP3} = 0.83 * \text{KP}, \text{Errorvar.} = 0.31, R^2 = 0.69$$

(0.066)	(0.039)
12.57	7.89

$$\text{KP4} = 0.84 * \text{KP}, \text{Errorvar.} = 0.29, R^2 = 0.71$$

(0.066)	(0.037)
12.82	7.72

$$\text{KP5} = 0.91 * \text{KP}, \text{Errorvar.} = 0.18, R^2 = 0.82$$

(0.063)	(0.029)
14.28	6.18

$$\text{Error Covariance for L3 and L2} = 0.15$$

(0.039)
3.74

$$\text{Error Covariance for K3 and L1} = 0.052$$

(0.018)
2.83

$$\text{Error Covariance for KP2 and KP1} = 0.16$$

(0.035)
4.49

$$\text{Error Covariance for KP4 and K2} = -0.06$$

(0.018)
-3.50

$$\text{Error Covariance for KP5 and KP2} = -0.08$$

(0.018)
-4.38

Structural Equations

$$L = 0.42 * K + 0.54 * \text{KP}, \text{Errorvar.} = 0.11, R^2 = 0.89$$

(0.21)	(0.21)	(0.037)
1.98	2.65	2.94

$$K = 0.93 * \text{KP}, \text{Errorvar.} = 0.13, R^2 = 0.87$$

(0.090)	(0.045)
10.39	2.86

Reduced Form Equations

$$L = 0.93 * \text{KP}, \text{Errorvar.} = 0.13, R^2 = 0.87$$

(0.074)
12.59

$K = 0.93 * KP$, Errorvar.= 0.13, $R^2 = 0.87$
 (0.090)
 10.39

Correlation Matrix of Independent Variables

KP

 1.00

Covariance Matrix of Latent Variables

	L	K	KP
L	1.00		
K	0.92	1.00	
KP	0.93	0.93	1.00

Goodness of Fit Statistics

Degrees of Freedom = 36
 Minimum Fit Function Chi-Square = 48.90 (P = 0.074)
 Normal Theory Weighted Least Squares Chi-Square = 46.85 (P = 0.11)
 Estimated Non-centrality Parameter (NCP) = 10.85
 90 Percent Confidence Interval for NCP = (0.0 ; 32.67)

Minimum Fit Function Value = 0.32
 Population Discrepancy Function Value (F0) = 0.071
 90 Percent Confidence Interval for F0 = (0.0 ; 0.21)
 Root Mean Square Error of Approximation (RMSEA) = 0.045
 90 Percent Confidence Interval for RMSEA = (0.0 ; 0.077)
 P-Value for Test of Close Fit (RMSEA < 0.05) = 0.57

Expected Cross-Validation Index (ECVI) = 0.70
 90 Percent Confidence Interval for ECVI = (0.63 ; 0.85)
 ECVI for Saturated Model = 0.87
 ECVI for Independence Model = 24.68

Chi-Square for Independence Model with 55 Degrees of Freedom = 3729.22
 Independence AIC = 3751.22
 Model AIC = 106.85
 Saturated AIC = 132.00
 Independence CAIC = 3795.56
 Model CAIC = 227.76
 Saturated CAIC = 398.01

Normed Fit Index (NFI) = 0.99
 Non-Normed Fit Index (NNFI) = 0.99
 Parsimony Normed Fit Index (PNFI) = 0.65
 Comparative Fit Index (CFI) = 1.00
 Incremental Fit Index (IFI) = 1.00
 Relative Fit Index (RFI) = 0.98

Critical N (CN) = 183.22

Root Mean Square Residual (RMR) = 0.021
 Standardized RMR = 0.025
 Goodness of Fit Index (GFI) = 0.95
 Adjusted Goodness of Fit Index (AGFI) = 0.90
 Parsimony Goodness of Fit Index (PGFI) = 0.52

Standardized Solution

LAMBDA-Y

	L	K
L1	0.89	--
L2	0.85	--
L3	0.73	--
K1	--	0.51
K2	--	0.50
K3	--	0.54

LAMBDA-X

	KP
KP1	0.76
KP2	0.89
KP3	0.83
KP4	0.84
KP5	0.91

BETA

	L	K
L	--	0.42
K	--	--

GAMMA

	KP
L	0.54
K	0.93

Correlation Matrix of ETA and KSI

	L	K	KP
L	1.00		
K	0.92	1.00	
KP	0.93	0.93	1.00

PSI

Note: This matrix is diagonal.

	L	K
	0.11	0.13

Regression Matrix ETA on KSI (Standardized)

	KP
L	0.93
K	0.93

Completely Standardized Solution

LAMBDA-Y

	L	K
L1	0.89	--
L2	0.85	--
L3	0.73	--
K1	--	0.78
K2	--	0.83
K3	--	0.85

LAMBDA-X

	KP
KP1	0.76
KP2	0.89
KP3	0.83
KP4	0.84
KP5	0.91

BETA

	L	K
L	--	0.42
K	--	--

GAMMA

	KP
L	0.54
K	0.93

Correlation Matrix of ETA and KSI

	L	K	KP
L	1.00		
K	0.92	1.00	
KP	0.93	0.93	1.00

PSI

Note: This matrix is diagonal.

L	K
---	---

	L1	L2	L3	K1	K2	K3
0.11		0.13				
THETA-EPS						
L1	0.20					
L2	--	0.28				
L3	--	0.15	0.46			
K1	--	--	--	0.40		
K2	--	--	--	--	0.32	
K3	0.08	--	--	--	--	0.29

	L1	L2	L3	K1	K2	K3
THETA-DELTA-EPS						
KP1	--	--	--	--	--	--
KP2	--	--	--	--	--	--
KP3	--	--	--	--	--	--
KP4	--	--	--	--	-0.10	--
KP5	--	--	--	--	--	--

	KP1	KP2	KP3	KP4	KP5
THETA-DELTA					
KP1	0.42				
KP2	0.16	0.20			
KP3	--	--	0.31		
KP4	--	--	--	0.29	
KP5	--	-0.08	--	--	0.18

Regression Matrix ETA on KSI (Standardized)

	KP
L	0.93
K	0.93

Time used: 0.016 Seconds

