

LAMPIRAN 7**OUPUT LISREL**

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Universitas
Esa Unggul
L I S R E L 8.80
BY

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The following lines were read from file D:\Lisrel skripsi\skripsit.SPJ:

Raw Data from file 'D:\Lisrel skripsi\skripsi.psf'
Sample Size = 135
Latent Variables kepuasan loyalitas layanan
Relationships
KK1 = kepuasan
KK2 = kepuasan
KK3 = kepuasan
KK4 = kepuasan
KK5 = kepuasan
LP1 = loyalitas
LP2 = loyalitas
LP3 = loyalitas
LP4 = loyalitas
KP1 = layanan
KP2 = layanan
KP3 = layanan
KP4 = layanan
KP5 = layanan

KP6 = layanan
 KP7 = layanan
 KP8 = layanan
 KP9 = layanan
 KP10 = layanan
 KP11 = layanan
 KP12 = layanan
 KP13 = layanan
 KP14 = layanan
 KP15 = layanan
 KP16 = layanan
 KP17 = layanan
 KP18 = layanan
 loyalitas = kepuasan
 kepuasan = layanan
 loyalitas = layanan
 Path Diagram
 End of Problem

Sample Size = 135

W_A_R_N_I_N_G: Matrix to be analyzed is not positive definite,
ridge option taken with ridge constant = 0.001

Covariance Matrix

KK1	KK2	KK3	KK4	KK5	LP1
KK1	0.20				
KK2	0.17	0.17			
KK3	0.20	0.17	0.28		
KK4	0.16	0.17	0.21	0.30	
KK5	0.19	0.16	0.24	0.19	0.32
LP1	0.13	0.10	0.16	0.09	0.20
LP2	0.13	0.14	0.16	0.16	0.19
LP3	0.17	0.14	0.16	0.12	0.19
LP4	0.13	0.13	0.12	0.12	0.15
KP1	0.11	0.13	0.08	0.10	0.09
KP2	0.10	0.10	0.09	0.09	0.06
KP3	0.03	0.03	0.01	0.01	0.00
KP4	0.06	0.06	0.08	0.08	0.04
KP5	0.07	0.07	0.06	0.06	0.10
KP6	0.13	0.13	0.14	0.14	0.13

KP7	0.02	0.03	0.04	0.03	0.03	0.02
KP8	0.10	0.10	0.09	0.08	0.08	0.06
KP9	0.06	0.07	0.09	0.09	0.05	0.06
KP10	0.07	0.07	0.07	0.07	0.07	0.07
KP11	0.03	0.03	0.02	0.02	0.02	0.03
KP12	0.03	0.03	0.02	0.02	0.02	0.03
KP13	0.03	0.03	0.03	0.03	0.03	0.03
KP14	0.07	0.07	0.07	0.07	0.07	0.07
KP15	0.10	0.10	0.12	0.15	0.11	0.06
KP16	0.09	0.10	0.10	0.09	0.08	0.05
KP17	0.16	0.13	0.17	0.19	0.22	0.09
KP18	0.17	0.17	0.19	0.22	0.18	0.10

Covariance Matrix

LP2	LP3	LP4	KP1	KP2	KP3
		LP2	0.20		
		LP3	0.13	0.20	
		LP4	0.13	0.10	0.16
		KP1	0.11	0.08	0.14
		KP2	0.10	0.10	0.10
KP3	0.03	0.03	0.06	0.06	0.06
KP4	0.03	0.03	0.09	0.06	0.06
KP5	0.10	0.07	0.10	0.09	0.07
KP6	0.09	0.13	0.12	0.08	0.09
KP7	0.02	0.06	0.05	0.01	0.09
KP8	0.06	0.06	0.09	0.07	0.10
KP9	0.06	0.06	0.06	0.05	0.06
KP10	0.07	0.07	0.07	0.07	0.07
KP11	0.03	0.03	0.06	0.05	0.06
KP12	0.03	0.03	0.06	0.05	0.06
KP13	0.03	0.03	0.07	0.06	0.07
KP14	0.07	0.07	0.07	0.07	0.07
KP15	0.13	0.10	0.09	0.07	0.10
KP16	0.12	0.09	0.08	0.06	0.09
KP17	0.12	0.16	0.11	0.06	0.09
KP18	0.17	0.13	0.13	0.14	0.10

Covariance Matrix

KP4	KP5	KP6	KP7	KP8	KP9
		KP4	0.19		
		KP5	0.06	0.10	
		KP6	0.11	0.06	0.21

	KP7	0.15	0.06	0.11	0.21	
KP8	0.09	0.07	0.12	0.09	0.16	
KP9	0.09	0.07	0.13	0.09	0.10	0.13
KP10	0.07	0.07	0.07	0.07	0.07	0.07
KP11	0.13	0.07	0.06	0.13	0.06	0.06
KP12	0.13	0.07	0.06	0.13	0.06	0.06
KP13	0.10	0.07	0.06	0.10	0.07	0.07
KP14	0.07	0.07	0.07	0.07	0.07	0.07
KP15	0.06	0.07	0.09	0.05	0.06	0.06
KP16	0.07	0.06	0.06	0.06	0.04	0.05
KP17	0.07	0.06	0.13	0.06	0.08	0.05
KP18	0.06	0.07	0.12	0.02	0.09	0.06

Covariance Matrix

KP10	KP11	KP12	KP13	KP14	KP15
	KP10	0.07			
	KP11	0.07	0.13		
	KP12	0.07	0.13	0.13	
	KP13	0.07	0.10	0.10	0.10
KP14	0.07	0.07	0.07	0.07	0.07
KP15	0.07	0.06	0.06	0.07	0.16
KP16	0.07	0.09	0.09	0.06	0.07
KP17	0.07	0.05	0.05	0.06	0.07
KP18	0.07	0.03	0.03	0.03	0.07

Covariance Matrix

KP16	KP17	KP18
	KP16	0.25
	KP17	0.08
KP18	0.11	0.15

Number of Iterations = 59

LISREL Estimates (Maximum Likelihood)

Measurement Equations

$$\begin{aligned} \text{KK1} &= 0.43 * \text{kepuasan}, \text{ Errorvar.} = 0.019, R^2 = 0.90 \\ &\quad (0.0038) \\ &\quad 5.17 \end{aligned}$$

$$\text{KK2} = 0.39 * \text{kepuasan}, \text{ Errorvar.} = 0.022, R^2 = 0.87$$

(0.018)	(0.0037)
21.92	6.01

KK3 = 0.45*kepuasan, Errorvar.= 0.076 , R² = 0.73
 (0.028) (0.010)
 16.34 7.33

KK4 = 0.40*kepuasan, Errorvar.= 0.15 , R² = 0.52
 (0.036) (0.019)
 11.18 7.85

KK5 = 0.47*kepuasan, Errorvar.= 0.11 , R² = 0.67
 (0.032) (0.014)
 14.66 7.54

LP1 = 0.33*loyalita, Errorvar.= 0.096 , R² = 0.53
 (0.012)
 7.78

LP2 = 0.36*loyalita, Errorvar.= 0.074 , R² = 0.63
 (0.038) (0.0099)
 9.33 7.49

LP3 = 0.37*loyalita, Errorvar.= 0.065 , R² = 0.68
 (0.038) (0.0089)
 9.69 7.29

LP4 = 0.32*loyalita, Errorvar.= 0.057 , R² = 0.65
 (0.034) (0.0077)
 9.45 7.43

KP1 = 0.26*layanan, Errorvar.= 0.23 , R² = 0.23
 (0.044) (0.028)
 5.91 8.18

KP2 = 0.26*layanan, Errorvar.= 0.064 , R² = 0.52
 (0.027) (0.0079)
 9.67 8.18

KP3 = 0.26*layanan, Errorvar.= 0.12 , R² = 0.37
 (0.034) (0.015)
 7.75 8.18

KP4 = 0.26*layanan, Errorvar.= 0.12 , R² = 0.37
 (0.034) (0.015)

7.76	8.18
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KP5 = 0.26*layanan, Errorvar.= 0.033 , R² = 0.67
 (0.023) (0.0041)
 11.66 8.18

KP6 = 0.26*layanan, Errorvar.= 0.14 , R ² = 0.32 (0.036) (0.018) 7.21 8.18	
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KP7 = 0.26*layanan, Errorvar.= 0.14 , R² = 0.33
 (0.036) (0.018)
 7.21 8.18

KP8 = 0.26*layanan, Errorvar.= 0.093 , R² = 0.43
 (0.031) (0.011)
 8.51 8.18

KP9 = 0.26*layanan, Errorvar.= 0.064 , R² = 0.52
 (0.027) (0.0079)
 9.66 8.18

KP10 = 0.26*layanan, Errorvar.= 0.00 , R² = 1.00
 (0.016) (0.00)
 16.35 0.98

KP11 = 0.26*layanan, Errorvar.= 0.064 , R² = 0.52
 (0.027) (0.0079)
 9.67 8.18

KP12 = 0.26*layanan, Errorvar.= 0.064 , R² = 0.52
 (0.027) (0.0079)
 9.67 8.18

KP13 = 0.26*layanan, Errorvar.= 0.033 , R² = 0.67
 (0.023) (0.0041)
 11.67 8.18

KP14 = 0.26*layanan, Errorvar.= 0.00 , R² = 1.00
 (0.016) (0.00)
 16.35 0.98

KP15 = 0.26*layanan, Errorvar.= 0.093 , R² = 0.43
 (0.031) (0.011)
 8.51 8.18

KP16 = 0.26*layanan, Errorvar.= 0.19 , R² = 0.27
 (0.041) (0.023)
 6.49 8.18

KP17 = 0.26*layanan, Errorvar.= 0.19 , R² = 0.27
 (0.041) (0.023)
 6.49 8.18

KP18 = 0.26*layanan, Errorvar.= 0.16 , R² = 0.30
 (0.038) (0.020)
 6.85 8.18

Structural Equations

kepuasan = 0.63*layanan, Errorvar.= 0.61 , R² = 0.39
 (0.081) (0.084)
 7.76 7.19

loyalita = 0.82*kepuasan + 0.24*layanan, Errorvar.= 0.018 , R² = 0.98
 (0.083) (0.055) (0.026)
 9.86 4.41 0.67

Reduced Form Equations

kepuasan = 0.63*layanan, Errorvar.= 0.61, R² = 0.39
 (0.081)
 7.76

loyalita = 0.76*layanan, Errorvar.= 0.42, R² = 0.58
 (0.099)
 7.67

Correlation Matrix of Independent Variables

layanan

1.00

Covariance Matrix of Latent Variables

kepuasan	loyalita	layanan
-----	-----	-----

kepuasan	1.00		
loyalita	0.97	1.00	
layanan	0.63	0.76	1.00

Goodness of Fit Statistics

Degrees of Freedom = 321
 Minimum Fit Function Chi-Square = 6149.80 ($P = 0.0$)
 Normal Theory Weighted Least Squares Chi-Square = 2853.92 ($P = 0.0$)
 Estimated Non-centrality Parameter (NCP) = 2532.92
 90 Percent Confidence Interval for NCP = (2365.82 ; 2707.40)

Minimum Fit Function Value = 45.89
 Population Discrepancy Function Value (F0) = 18.90
 90 Percent Confidence Interval for F0 = (17.66 ; 20.20)
 Root Mean Square Error of Approximation (RMSEA) = 0.24
 90 Percent Confidence Interval for RMSEA = (0.23 ; 0.25)
 P-Value for Test of Close Fit (RMSEA < 0.05) = 0.00

Expected Cross-Validation Index (ECVI) = 22.15
 90 Percent Confidence Interval for ECVI = (20.90 ; 23.45)
 ECVI for Saturated Model = 5.64
 ECVI for Independence Model = 94.73

Chi-Square for Independence Model with 351 Degrees of Freedom = 12639.30
 Independence AIC = 12693.30
 Model AIC = 2967.92
 Saturated AIC = 756.00
 Independence CAIC = 12798.74
 Model CAIC = 3190.52
 Saturated CAIC = 2232.19

Normed Fit Index (NFI) = 0.51
 Non-Normed Fit Index (NNFI) = 0.48
 Parsimony Normed Fit Index (PNFI) = 0.47
 Comparative Fit Index (CFI) = 0.53
 Incremental Fit Index (IFI) = 0.53
 Relative Fit Index (RFI) = 0.47
 Critical N (CN) = 9.34

Root Mean Square Residual (RMR) = 0.034
 Standardized RMR = 0.17
 Goodness of Fit Index (GFI) = 0.39
 Adjusted Goodness of Fit Index (AGFI) = 0.28

Parsimony Goodness of Fit Index (PGFI) = 0.33

The Modification Indices Suggest to Add an Error Covariance
Between and Decrease in Chi-Square New Estimate

KK2	KK1	30.5	0.02
KK3	KK2	10.8	-0.02
KK4	KK1	11.4	-0.02
KK4	KK2	8.5	0.02
KK4	KK3	9.9	0.03
KK5	KK1	10.4	-0.02
KK5	KK2	23.8	-0.03
KK5	KK3	11.8	0.03
LP1	KK2	38.5	-0.03
LP1	KK3	10.1	0.03
LP1	KK4	12.3	-0.04
LP1	KK5	31.4	0.05
LP2	KK1	36.6	-0.03
LP2	KK5	16.4	0.03
LP3	KK1	24.4	0.02
LP3	KK2	9.5	-0.01
LP3	KK4	8.0	-0.03
LP3	KK5	8.5	0.02
LP4	KK2	25.7	0.02
LP4	KK3	13.8	-0.02
LP4	LP2	9.6	0.02
LP4	LP3	28.7	-0.03
KP1	KK2	11.8	0.02
KP1	KK3	10.1	-0.04
KP1	LP4	18.5	0.04
KP2	LP1	11.6	-0.02
KP4	KK3	8.6	0.03
KP4	LP1	15.0	-0.04
KP4	LP2	19.0	-0.04
KP4	LP3	21.5	-0.04
KP4	LP4	17.6	0.03
KP4	KP3	23.8	0.05
KP5	KK1	15.3	-0.01
KP5	KK5	18.6	0.02
KP5	LP1	32.8	0.03
KP5	LP2	41.4	0.03
KP5	LP4	51.3	0.03
KP5	KP1	9.2	0.02
KP6	LP1	23.0	-0.05
KP6	KP4	16.3	0.05
KP7	KP1	13.4	-0.06
KP7	KP3	16.4	0.05

KP7	KP4	50.3	0.08
KP7	KP6	10.4	0.04
KP8	KK2	12.4	0.02
KP8	LP2	8.2	-0.02
KP8	LP3	10.0	-0.02
KP8	KP2	16.9	0.03
KP8	KP6	26.6	0.05
KP9	KK3	18.3	0.03
KP9	KP4	11.0	0.03
KP9	KP6	47.6	0.06
KP9	KP8	16.9	0.03
KP11	LP4	12.4	0.02
KP11	KP3	62.0	0.06
KP11	KP4	61.9	0.06
KP11	KP7	47.6	0.06
KP12	LP4	12.4	0.02
KP12	KP3	62.0	0.06
KP12	KP4	61.9	0.06
KP12	KP7	47.6	0.06
KP12	KP11	133.6	0.06
KP13	LP1	8.1	-0.01
KP13	LP4	28.1	0.02
KP13	KP3	29.8	0.03
KP13	KP4	29.7	0.03
KP13	KP7	22.9	0.03
KP13	KP11	64.3	0.03
KP13	KP12	64.3	0.03
KP14	KP10	86.3	0.01
KP15	KK4	25.5	0.05
KP15	LP1	13.7	-0.03
KP15	LP2	28.3	0.04
KP15	KP2	16.9	0.03
KP16	LP2	14.5	0.04
KP16	KP15	15.6	0.04
KP17	KK2	8.1	-0.02
KP17	KK4	11.6	0.05
KP17	KK5	27.1	0.07
KP17	LP1	8.7	-0.03
KP17	LP3	9.9	0.03
KP17	KP6	20.0	0.06
KP17	KP15	48.8	0.08
KP18	KK4	21.0	0.06
KP18	LP1	10.4	-0.04
KP18	LP2	9.9	0.03
KP18	KP1	17.1	0.07
KP18	KP2	9.7	0.03

KP18	KP3	16.1	-0.05
KP18	KP6	15.3	0.05
KP18	KP7	15.5	-0.05
KP18	KP11	22.1	-0.04
KP18	KP12	22.1	-0.04
KP18	KP13	35.7	-0.04
KP18	KP15	30.4	0.06
KP18	KP16	8.9	0.04
KP18	KP17	28.0	0.08

Time used: 0.172 Seconds