

## 附 錄 四

表 5-1 SEM 適配指標之判斷規準

Fit index	判斷準則	圖 5-1 採 用	圖 5-2 不採用	圖 5-3 採 用
2 ( Chi-square )	越小越好	Ok	Ok	Ok
2/df ( 卡方值除以其自由度 )	< 2 or 3	Ok	Ok	Ok
Goodness-of-fit index ( GFI )	> .9	Ok	Ok	Ok
Adjusted GFI	> .9	Ok	Ok	Ok
NFI	> .9	Ok	Ok	Ok
NNFI	> .9	Ok	Ok	Ok
Centrality	> .9	Ok	Ok	Ok
Comparative fit index ( CFI )	> .9	Ok	Ok	Ok
Root mean square residual ( RMR )	< .05	Ok	Ok	Ok
RMSEA estimate	< .05	Ok	No	Ok

根據表 5-1 顯示，圖 5-1 均符合 SEM 適配指標之判斷規準，屬於理想，採用該架構。圖 5-2 在 RMSEA estimate 不符合 SEM 適配指標之判斷規準，不採用。圖 5-3 均符合 SEM 適配指標之判斷規準，屬於理想，採用該架構。

圖 5-1 與圖 4-8 吻合；圖 5-3 與圖 4-10 吻合。

## 符號代表

- O: 聰穎開放性
- C: 嚴謹自律性
- E: 外傾支配性
- A: 和善性
- N: 神經質
- VT: 工作目的價值觀
- VI: 工作手段價值觀
- SI: 內在滿意
- SE: 外在滿意
- SA: 一般滿意

圖 5-1 「五大人格特質」、「工作價值觀」與「內在滿意」之路徑分析圖

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BY

Karl G. Jöreskog & Dag Sörbom

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The following lines were read from file D:\0601\Lisrel\_model\01new.sp1:

ccl

Observed Variables: O C E A N VT VI SI

Correlation Matrix

1							
.306	1						
.216	.347	1					
.194	.441	.186	1				
-.181	-.408	-.335	-.437	1			
.176	.395	.301	.150	-.131	1		
.248	.430	.245	.269	-.125	.586	1	
.080	.294	.179	.196	-.127	.399	.458	1

Sample Size: 568

Relationships

VT=C E

VI=O C E A N

SI=VT VI

Set the Error Covariance of VI and VT Free

Path Diagram

End of Problem

Sample Size = 568

ccl

Correlation Matrix

	VT	VI	SI	O	C	E
	-----	-----	-----	-----	-----	-----
VT	1.00					
VI	0.59	1.00				
SI	0.40	0.46	1.00			
O	0.18	0.25	0.08	1.00		
C	0.40	0.43	0.29	0.31	1.00	
E	0.30	0.24	0.18	0.22	0.35	1.00
A	0.15	0.27	0.20	0.19	0.44	0.19
N	-0.13	-0.13	-0.13	-0.18	-0.41	-0.34

Correlation Matrix

	A	N
	-----	-----
A	1.00	
N	-0.44	1.00

ccl

Number of Iterations = 4

LISREL Estimates (Maximum Likelihood)

### Structural Equations

$$VT = 0.33*C + 0.19*E, \text{ Errorvar.} = 0.81, R^2 = 0.19$$

(0.041)	(0.041)	(0.049)
8.14	4.59	16.76

$$VI = 0.093*O + 0.34*C + 0.11*E + 0.14*A + 0.097*N, \text{ Errorvar.} = 0.78, R^2 = 0.22$$

(0.034)	(0.044)	(0.041)	(0.038)	(0.038)	(0.046)
2.73	7.79	2.79	3.59	2.53	16.76

$$SI = 0.20*VT + 0.34*VI, \text{ Errorvar.} = 0.76, R^2 = 0.23$$

(0.045)	(0.045)	(0.046)
4.39	7.51	16.76

Error Covariance for VI and VT = 0.39

(0.037)

10.51

### Reduced Form Equations

$$VT = 0.0*O + 0.33*C + 0.19*E + 0.0*A + 0.0*N, \text{ Errorvar.} = 0.81, R^2 = 0.19$$

(0.041)	(0.041)
8.14	4.59

$$VI = 0.093*O + 0.34*C + 0.11*E + 0.14*A + 0.097*N, \text{ Errorvar.} = 0.78, R^2 = 0.22$$

(0.034)	(0.044)	(0.041)	(0.038)	(0.038)
2.73	7.79	2.79	3.59	2.53

$$SI = 0.032*O + 0.18*C + 0.076*E + 0.046*A + 0.033*N, \text{ Errorvar.} = 0.94, R^2 = 0.059$$

(0.012)	(0.024)	(0.020)	(0.014)	(0.014)
2.56	7.49	3.73	3.24	2.40

### Correlation Matrix of Independent Variables

	O	C	E	A	N
O	1.00 (0.06) 16.76				
C	0.31 (0.04) 6.94	1.00 (0.06) 16.76			
E	0.22 (0.04) 5.01	0.35 (0.04) 7.77	1.00 (0.06) 16.76		
A	0.19 (0.04) 4.51	0.44 (0.05) 9.57	0.19 (0.04) 4.34	1.00 (0.06) 16.76	
N	-0.18 (0.04) -4.22	-0.41 (0.05) -8.96	-0.34 (0.04) -7.53	-0.44 (0.05) -9.49	1.00 (0.06) 16.76

Goodness of Fit Statistics

Degrees of Freedom = 8

Minimum Fit Function Chi-Square = 15.10 (P = 0.057)

Normal Theory Weighted Least Squares Chi-Square = 15.25 (P = 0.054)

Estimated Non-centrality Parameter (NCP) = 7.25

90 Percent Confidence Interval for NCP = (0.0 ; 22.37)

Minimum Fit Function Value = 0.027

Population Discrepancy Function Value (F0) = 0.013

90 Percent Confidence Interval for F0 = (0.0 ; 0.040)

Root Mean Square Error of Approximation (RMSEA) = 0.040  
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.071)  
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.66

Expected Cross-Validation Index (ECVI) = 0.13  
90 Percent Confidence Interval for ECVI = (0.11 ; 0.15)  
ECVI for Saturated Model = 0.13  
ECVI for Independence Model = 1.88

Chi-Square for Independence Model with 28 Degrees of Freedom = 1042.97

Independence AIC = 1058.97  
Model AIC = 71.25  
Saturated AIC = 72.00  
Independence CAIC = 1101.71  
Model CAIC = 220.83  
Saturated CAIC = 264.32

Normed Fit Index (NFI) = 0.99  
Non-Normed Fit Index (NNFI) = 0.98  
Parsimony Normed Fit Index (PNFI) = 0.28  
Comparative Fit Index (CFI) = 0.99  
Incremental Fit Index (IFI) = 0.99  
Relative Fit Index (RFI) = 0.95

Critical N (CN) = 755.46

Root Mean Square Residual (RMR) = 0.024  
Standardized RMR = 0.024  
Goodness of Fit Index (GFI) = 0.99  
Adjusted Goodness of Fit Index (AGFI) = 0.97  
Parsimony Goodness of Fit Index (PGFI) = 0.22

Time used: 0.063 Seconds



圖 5-2 「五大人格特質」、「工作價值觀」與「外在滿意」之路徑分析圖



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BY

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The following lines were read from file D:\0601\Lisrel\_model\02new.sp1:

ccl

Observed Variables: O C E A N VT VI SE

Correlation Matrix

1								
.306	1							
.216	.347	1						
.194	.441	.186	1					
-.181	-.408	-.335	-.437	1				
.176	.395	.301	.150	-.131	1			
.248	.430	.245	.269	-.125	.586	1		
-.051	.045	.151	.087	-.101	.167	.190	1	

Sample Size: 568

Relationships

VT=C E

VI=O C E A N

SE=VI

SE=0 E

Set the Error Covariance of VT and VI Free

Path Diagram

End of Problem

Sample Size = 568

ccl

Correlation Matrix

	VT	VI	SE	O	C	E
VT	1.00					
VI	0.59	1.00				
SE	0.17	0.19	1.00			
O	0.18	0.25	-0.05	1.00		
C	0.40	0.43	0.04	0.31	1.00	
E	0.30	0.24	0.15	0.22	0.35	1.00
A	0.15	0.27	0.09	0.19	0.44	0.19
N	-0.13	-0.13	-0.10	-0.18	-0.41	-0.34

Correlation Matrix

	A	N
A	1.00	
N	-0.44	1.00

ccl

Number of Iterations = 4

LISREL Estimates (Maximum Likelihood)

### Structural Equations

$$VT = 0.33*C + 0.19*E, \text{ Errorvar.} = 0.81, R^2 = 0.19$$

(0.041)	(0.041)	(0.049)
8.14	4.59	16.76

$$VI = 0.093*O + 0.34*C + 0.11*E + 0.14*A + 0.097*N, \text{ Errorvar.} = 0.78, R^2 = 0.22$$

(0.034)	(0.044)	(0.041)	(0.038)	(0.038)	(0.046)
2.73	7.79	2.79	3.59	2.53	16.76

$$SE = 0.19*VI - 0.13*O + 0.13*E, \text{ Errorvar.} = 0.94, R^2 = 0.063$$

(0.043)	(0.043)	(0.043)	(0.056)
4.39	-2.97	3.09	16.76

Error Covariance for VI and VT = 0.39

(0.037)
10.51

### Reduced Form Equations

$$VT = 0.0*O + 0.33*C + 0.19*E + 0.0*A + 0.0*N, \text{ Errorvar.} = 0.81, R^2 = 0.19$$

(0.041)	(0.041)
8.14	4.59

$$VI = 0.093*O + 0.34*C + 0.11*E + 0.14*A + 0.097*N, \text{ Errorvar.} = 0.78, R^2 = 0.22$$

(0.034)	(0.044)	(0.041)	(0.038)	(0.038)
2.73	7.79	2.79	3.59	2.53

$$SE = -0.11*O + 0.065*C + 0.15*E + 0.026*A + 0.018*N, \text{ Errorvar.} = 0.97, R^2 = 0.035$$

(0.043)	(0.017)	(0.043)	(0.0093)	(0.0083)
-2.56	3.83	3.59	2.78	2.19

Correlation Matrix of Independent Variables

	O	C	E	A	N
O	1.00 (0.06) 16.76				
C	0.31 (0.04) 6.94	1.00 (0.06) 16.76			
E	0.22 (0.04) 5.01	0.35 (0.04) 7.77	1.00 (0.06) 16.76		
A	0.19 (0.04) 4.51	0.44 (0.05) 9.57	0.19 (0.04) 4.34	1.00 (0.06) 16.76	
N	-0.18 (0.04) -4.22	-0.41 (0.05) -8.96	-0.34 (0.04) -7.53	-0.44 (0.05) -9.49	1.00 (0.06) 16.76

Goodness of Fit Statistics

Degrees of Freedom = 7

Minimum Fit Function Chi-Square = 13.89 (P = 0.053)

Normal Theory Weighted Least Squares Chi-Square = 13.28 (P = 0.066)

Estimated Non-centrality Parameter (NCP) = 6.28

90 Percent Confidence Interval for NCP = (0.0 ; 20.66)

Minimum Fit Function Value = 0.025

Population Discrepancy Function Value (F0) = 0.011

90 Percent Confidence Interval for F0 = (0.0 ; 0.037)  
Root Mean Square Error of Approximation (RMSEA) = 0.040  
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.072)  
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.65

Expected Cross-Validation Index (ECVI) = 0.13  
90 Percent Confidence Interval for ECVI = (0.12 ; 0.15)  
ECVI for Saturated Model = 0.13  
ECVI for Independence Model = 1.68

Chi-Square for Independence Model with 28 Degrees of Freedom = 925.79

Independence AIC = 941.79  
Model AIC = 71.28  
Saturated AIC = 72.00  
Independence CAIC = 984.53  
Model CAIC = 226.20  
Saturated CAIC = 264.32

Normed Fit Index (NFI) = 0.98  
Non-Normed Fit Index (NNFI) = 0.97  
Parsimony Normed Fit Index (PNFI) = 0.25  
Comparative Fit Index (CFI) = 0.99  
Incremental Fit Index (IFI) = 0.99  
Relative Fit Index (RFI) = 0.94

Critical N (CN) = 755.00

Root Mean Square Residual (RMR) = 0.020  
Standardized RMR = 0.020  
Goodness of Fit Index (GFI) = 0.99  
Adjusted Goodness of Fit Index (AGFI) = 0.97  
Parsimony Goodness of Fit Index (PGFI) = 0.19

Time used: 0.078 Seconds

圖 5-3 「五大人格特質」、「工作價值觀」與「一般滿意」之路徑分析圖



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Karl G. J eskog & Dag S bom

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The following lines were read from file D:\0601\Lisrel\_model\03new.sp1:

ccl

Observed Variables: O C E A N VT VI SA

Correlation Matrix

1								
.306	1							
.216	.347	1						
.194	.441	.186	1					
-.181	-.408	-.335	-.437	1				
.176	.395	.301	.150	-.131	1			
.248	.430	.245	.269	-.125	.586	1		
.036	.219	.196	.172	-.135	.350	.398	1	

Sample Size: 568

Relationships

VT=C E

VI=O C E A N

SA=VT VI

Set the Error Covariance of VT and VI Free

Path Diagram

End of Problem

Sample Size = 568

ccl

Correlation Matrix

	VT	VI	SA	O	C	E
	-----	-----	-----	-----	-----	-----
VT	1.00					
VI	0.59	1.00				
SA	0.35	0.40	1.00			
O	0.18	0.25	0.04	1.00		
C	0.40	0.43	0.22	0.31	1.00	
E	0.30	0.24	0.20	0.22	0.35	1.00
A	0.15	0.27	0.17	0.19	0.44	0.19
N	-0.13	-0.13	-0.14	-0.18	-0.41	-0.34

Correlation Matrix

	A	N
	-----	-----
A	1.00	
N	-0.44	1.00

ccl

Number of Iterations = 5

LISREL Estimates (Maximum Likelihood)

### Structural Equations

$$VT = 0.33*C + 0.19*E, \text{ Errorvar.} = 0.81, R^2 = 0.19$$

(0.041)	(0.041)	(0.049)
8.14	4.59	16.76

$$VI = 0.093*O + 0.34*C + 0.11*E + 0.14*A + 0.097*N, \text{ Errorvar.} = 0.78, R^2 = 0.22$$

(0.034)	(0.044)	(0.041)	(0.038)	(0.038)	(0.046)
2.73	7.79	2.79	3.59	2.53	16.76

$$SA = 0.18*VT + 0.29*VI, \text{ Errorvar.} = 0.82, R^2 = 0.18$$

(0.047)	(0.047)	(0.049)
3.78	6.23	16.76

Error Covariance for VI and VT = 0.39

(0.037)

10.51

### Reduced Form Equations

$$VT = 0.0*O + 0.33*C + 0.19*E + 0.0*A + 0.0*N, \text{ Errorvar.} = 0.81, R^2 = 0.19$$

(0.041)	(0.041)
8.14	4.59

$$VI = 0.093*O + 0.34*C + 0.11*E + 0.14*A + 0.097*N, \text{ Errorvar.} = 0.78, R^2 = 0.22$$

(0.034)	(0.044)	(0.041)	(0.038)	(0.038)
2.73	7.79	2.79	3.59	2.53

$$SA = 0.027*O + 0.16*C + 0.066*E + 0.040*A + 0.028*N, \text{ Errorvar.} = 0.95, R^2 = 0.045$$

(0.011)	(0.023)	(0.018)	(0.013)	(0.012)
2.50	7.04	3.67	3.11	2.35

### Correlation Matrix of Independent Variables

	O	C	E	A	N
O	1.00 (0.06) 16.76				
C	0.31 (0.04) 6.94	1.00 (0.06) 16.76			
E	0.22 (0.04) 5.01	0.35 (0.04) 7.77	1.00 (0.06) 16.76		
A	0.19 (0.04) 4.51	0.44 (0.05) 9.57	0.19 (0.04) 4.34	1.00 (0.06) 16.76	
N	-0.18 (0.04) -4.22	-0.41 (0.05) -8.96	-0.34 (0.04) -7.53	-0.44 (0.05) -9.49	1.00 (0.06) 16.76

Goodness of Fit Statistics

Degrees of Freedom = 8

Minimum Fit Function Chi-Square = 18.45 (P = 0.018)

Normal Theory Weighted Least Squares Chi-Square = 18.51 (P = 0.018)

Estimated Non-centrality Parameter (NCP) = 10.51

90 Percent Confidence Interval for NCP = (1.63 ; 27.06)

Minimum Fit Function Value = 0.033

Population Discrepancy Function Value (F0) = 0.019

90 Percent Confidence Interval for F0 = (0.0029 ; 0.048)

Root Mean Square Error of Approximation (RMSEA) = 0.048  
90 Percent Confidence Interval for RMSEA = (0.019 ; 0.078)  
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.49

Expected Cross-Validation Index (ECVI) = 0.13  
90 Percent Confidence Interval for ECVI = (0.12 ; 0.16)  
ECVI for Saturated Model = 0.13  
ECVI for Independence Model = 1.82

Chi-Square for Independence Model with 28 Degrees of Freedom = 1005.83

Independence AIC = 1021.83  
Model AIC = 74.51  
Saturated AIC = 72.00  
Independence CAIC = 1064.57  
Model CAIC = 224.09  
Saturated CAIC = 264.32

Normed Fit Index (NFI) = 0.98  
Non-Normed Fit Index (NNFI) = 0.96  
Parsimony Normed Fit Index (PNFI) = 0.28  
Comparative Fit Index (CFI) = 0.99  
Incremental Fit Index (IFI) = 0.99  
Relative Fit Index (RFI) = 0.94

Critical N (CN) = 618.44

Root Mean Square Residual (RMR) = 0.025  
Standardized RMR = 0.025  
Goodness of Fit Index (GFI) = 0.99  
Adjusted Goodness of Fit Index (AGFI) = 0.96  
Parsimony Goodness of Fit Index (PGFI) = 0.22

Time used: 0.063 Seconds