

ภาคผนวก ข

ตัวอย่างผลการวิเคราะห์การทำหน้าที่ต่างกันของข้อสอบด้วยวิธีถดถอยโลจิสติก

LOGISTIC REGRESSION VAR = q1

/METHOD = ENTER group total /METHOD = ENTER group*total

/CONTRAST (group) = Indicator

/CLASSPLOT /CASEWISE OUTLIER (3)

/PRINT=GOODFIT SUMMARY CI (95)

/CRITERIA PIN(.05) POUT(.10) ITERATE(20) CUT (.5) .

Logistic Regression

Case Processing Summary

Unweighted Cases(a)		N	Percent
Selected Cases	Included in Analysis	2000	100.0
	Missing Cases	0	.0
	Total	2000	100.0
	Unselected Cases	0	.0
Total		2000	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
0	0
1	1

Categorical Variables Codings

		Frequency	Parameter coding
			(1)
GROU	1	1000	1.000
P	2	1000	.000

Block 0: Beginning Block

Classification Table(a,b)

Observed			Predicted		
			Q1		Percentage
			0	1	Correct
Step 0	Q1	0	0	873	.0
		1	0	1127	100.0
Overall Percentage					56.4

a Constant is included in the model.

b The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.255	.045	32.083	1	.000	1.291

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	GROUP(1)	7.564	1	.006
		TOTAL	258.538	1	.000
	Overall Statistics		263.589	2	.000

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	278.380	2	.000
	Block	278.380	2	.000
	Model	278.380	2	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2461.863	.130	.174

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	13.258	8	.103

Contingency Table for Hosmer and Lemeshow Test

		Q1 = 0		Q1 = 1		Total
		Observed	Expected	Observed	Expected	
Step 1	1	143	133.186	41	50.814	184
	2	125	119.300	57	62.700	182
	3	93	108.425	87	71.575	180
	4	108	117.703	106	96.297	214
	5	95	98.782	106	102.218	201
	6	82	77.593	101	105.407	183
	7	80	73.474	134	140.526	214
	8	56	56.716	143	142.284	199
	9	49	43.766	134	139.234	183
	10	42	44.056	218	215.944	260

Classification Table(a)

	Observed		Predicted		
			Q1		Percentage
			0	1	Correct
Step 1	Q1	0	507	366	58.1
		1	331	796	70.6
Overall Percentage					65.2

a The cut value is .500

Block 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.288	1	.592
	Block	.288	1	.592
	Model	278.668	3	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2461.575	.130	.174

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	15.715	8	.047

Contingency Table for Hosmer and Lemeshow Test

		Q1 = 0		Q1 = 1		Total
		Observed	Expected	Observed	Expected	
Step 1	1	170	155.074	47	61.926	217
	2	123	127.026	75	70.974	198
	3	97	112.816	95	79.184	192
	4	92	101.540	96	86.460	188
	5	100	95.149	97	101.851	197
	6	82	79.523	112	114.477	194
	7	67	65.533	130	131.467	197
	8	62	57.434	144	148.566	206
	9	54	48.077	158	163.923	212
	10	26	30.827	173	168.173	199

Classification Table(a)

			Predicted		
			Q1		Percentage
			0	1	Correct
Step 1	Q1	0	507	366	58.1
		1	331	796	70.6
	Overall Percentage				65.2

a The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
								Lower	Upper
Step 1(a)	GROUP(1)	-.094	.281	.112	1	.738	.910	.525	1.579
	TOTAL	.107	.010	119.725	1	.000	1.113	1.092	1.135
	GROUP(1) by TOTAL	-.007	.014	.288	1	.592	.993	.967	1.019
	Constant	-1.762	.202	76.199	1	.000	.172		

a Variable(s) entered on step 1: GROUP * TOTAL .

