

Logistic Regression

Notes

Output Created	18-DEC-2024 13:09:18	
Comments		
Input	Data	/Users/theanirudhgj/Downloads/encoded data....
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1470
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing
Syntax	LOGISTIC REGRESSION VARIABLES Attrition /METHOD=ENTER DistanceWLBIInteraction DistanceFromHome JobSatisfaction WorkLifeBalance /PRINT=GOODFIT /CRITERIA=PIN(0.05) POUT(0.10) ITERATE(20) CUT(0.5).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.00

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	1470	100.0
	Missing Cases	0	.0
	Total	1470	100.0
Unselected Cases		0	.0
Total		1470	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

Block 0: Beginning Block

Classification Table^{a,b}

Observed		Predicted		Percentage Correct
		Attrition 0	Attrition 1	
Step 0 Attrition	0	1233	0	100.0
	1	237	0	.0
Overall Percentage				83.9

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	-1.649	.071	540.645	1	<.001	.192

Variables not in the Equation

		Score	df	Sig.
Step 0 Variables	DistanceWLBIInteraction	3.457	1	.063
	DistanceFromHome	8.926	1	.003
	JobSatisfaction	15.741	1	<.001
	WorkLifeBalance	6.010	1	.014
Overall Statistics		32.097	4	<.001

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	30.937	4	<.001
	Block	30.937	4	<.001
	Model	30.937	4	<.001

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	1267.646 ^a	.021	.036

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	3.006	8	.934

Contingency Table for Hosmer and Lemeshow Test

	Observed	Attrition = 0		Attrition = 1		Total
		Expected	Observed	Expected	Total	
Step 1	1	133	135.038	16	13.962	149
	2	127	126.736	15	15.264	142
	3	132	130.357	16	17.643	148
	4	131	129.307	18	19.693	149
	5	124	125.856	23	21.144	147
	6	121	123.831	26	23.169	147
	7	126	123.965	24	26.035	150
	8	120	119.731	28	28.269	148
	9	121	116.107	27	31.893	148
	10	98	102.073	44	39.927	142

Classification Table^a

Observed	Predicted		Percentage Correct
	Attrition 0	1	
Step 1 Attrition	0	1233	0
	1	237	0
Overall Percentage			83.9

a. The cut value is .500

Variables in the Equation

	B	S.E.	Wald	df	Sig.
Step 1 ^a	DistanceWLBIInteraction	-.010	.012	.756	1 .385
	DistanceFromHome	.052	.032	2.559	1 .110
	JobSatisfaction	-.257	.064	16.064	1 <.001
	WorkLifeBalance	-.141	.155	.831	1 .362
	Constant	-.829	.465	3.176	1 .075

Variables in the Equation

	Exp(B)
Step 1 ^a	DistanceWLBIInteraction .990
	DistanceFromHome 1.053
	JobSatisfaction .774
	WorkLifeBalance .868
	Constant .437

a. Variable(s) entered on step 1: DistanceWLBIInteraction, DistanceFromHome, JobSatisfaction, WorkLifeBalance.