

Nominal Logistic Fit for Retention_Risk

Converged in Gradient, 16 iterations

Whole Model Test

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	22.57531	11	45.15062	<.0001*
Full	179.13820			
Reduced	201.71351			

RSquare (U)	0.1119
AICc	383.395
BIC	426.397
Observations (or Sum Wgts)	292

Measure	Training	Definition
Entropy RSquare	0.1119	$1 - \text{Loglike}(\text{model}) / \text{Loglike}(0)$
Generalized RSquare	0.1913	$(1 - (L(0) / L(\text{model}))^{(2/n)}) / (1 - L(0)^{(2/n)})$
Mean -Log p	0.6135	$\sum -\text{Log}(\rho_{jj}) / n$
RMSE	0.4674	$\sqrt{\sum (y_{jj} - \rho_{jj})^2 / n}$
Mean Abs Dev	0.4335	$\sum y_{jj} - \rho_{jj} / n$
Misclassification Rate	0.4075	$\sum (\rho_{jj} \neq \rho_{\text{Max}}) / n$
N	292	n

Lack Of Fit

Source	DF	-LogLikelihood	ChiSquare	Prob>ChiSq
Lack Of Fit	280	179.13820	358.2764	
Saturated	291	0.00000		
Fitted	11	179.13820		0.0011*

Parameter Estimates

Term	Estimate	Std Error	ChiSquare	Prob>ChiSq
Intercept	2.33218302	0.8864706	6.92	0.0085*
AvgGPAChg_To	-0.0661216	0.2488607	0.07	0.7905
Base_GPA	0.11727132	0.207075	0.32	0.5712
AvgDelta_AttPass_To	-0.2167017	0.0845154	6.57	0.0103*
AvgQualPts_To	-0.0061805	0.0218771	0.08	0.7776
AvgProGpa_To	-0.7148001	0.2830984	6.38	0.0116*
Age	-0.005299	0.0235561	0.05	0.8220
Race_Asian	-0.5714945	0.4474988	1.63	0.2016
Race_Black	-0.6246995	0.3556806	3.08	0.0790
Race_Hispanic	-0.3323564	0.3341204	0.99	0.3199
Race_Indian	Unstable -18.501669	5439.5271	0.00	0.9973
Gender_Female	0.17439465	0.2637576	0.44	0.5085

For log odds of 0/1

Effect Likelihood Ratio Tests

Source	Nparm	DF	L-R	
			ChiSquare	Prob>ChiSq
AvgGPAChg_To	1	1	0.07065579	0.7904
Base_GPA	1	1	0.3258691	0.5681
AvgDelta_AttPass_To	1	1	6.80829666	0.0091*
AvgQualPts_To	1	1	0.07982191	0.7775
AvgProGpa_To	1	1	6.81943811	0.0090*
Age	1	1	0.0503144	0.8225
Race_Asian	1	1	1.66320202	0.1972
Race_Black	1	1	3.12958339	0.0769
Race_Hispanic	1	1	0.99311383	0.3190
Race_Indian	1	1	2.91138569	0.0880
Gender_Female	1	1	0.43762834	0.5083