Figure 1: Logistic Regression - Direct Deposit Sign up

The LOGISTIC Procedure

Model Information		
Data Set	WORK.BANK	
Response Variable	Direct	Direct
Number of Response Levels	2	
Model	binary logit	
Optimization Technique	Fisher's scoring	

Number of Observations Read	50
Number of Observations Used	50

Response Profile		
Ordered Value	**Direct**	**Total Frequency**
1	0	35
2	1	15

Probability modeled is Direct='1'.

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	**Intercept Only**	**Intercept and Covariates**
AIC	63.086	55.626
SC	64.998	59.450
-2 Log L	61.086	51.626

Testing Global Null Hypothesis: BETA=0			
Test	**Chi-Square**	**DF**	**Pr > ChiSq**
Likelihood Ratio	9.4603	1	0.0021
Score	9.3505	1	0.0022
Wald	5.9823	1	0.0145

Analysis of Maximum Likelihood Estimates					
Parameter	**DF**	**Estimate**	**Standard Error**	**Wald Chi-Square**	**Pr > ChiSq**
Intercept	1	-2.6333	0.7985	10.8753	0.0010
Balance	1	0.2202	0.0900	5.9823	0.0145

Odds Ratio Estimates			
Effect	**Point Estimate**	**95% Wald Confidence Limits**	
Balance	1.246	1.045	1.487

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	81.7	**Somers' D**	0.634
Percent Discordant	18.3	**Gamma**	0.634
Percent Tied	0.0	**Tau-a**	0.272
Pairs	525	**c**	0.817

Figure 2: Logistic Regression - Lakeland Retention Model

The LOGISTIC Procedure

Model Information		
Data Set	WORK.LAKELAND	
Response Variable	Return	Return
Number of Response Levels	2	
Model	binary logit	
Optimization Technique	Fisher's scoring	

Number of Observations Read	100
Number of Observations Used	100

Response Profile		
Ordered Value	Return	Total Frequency
1	0	34
2	1	66

Probability modeled is Return='1'.

Class Level Information		
Class	Value	Design Variables
Program	0	1
	1	-1

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	130.207	86.338
SC	132.812	94.153
-2 Log L	128.207	80.338

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	47.8694	2	<.0001
Score	40.3936	2	<.0001
Wald	24.4151	2	<.0001

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Program	1	7.6813	0.0056
GPA	1	14.2362	0.0002

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	-6.1122	1.7512	12.1819	0.0005
Program	0	1	-0.7804	0.2816	7.6813	0.0056
GPA		1	2.5388	0.6729	14.2362	0.0002

Odds Ratio Estimates

Effect	Odds Ratio Estimates Point Estimate	95% Wald Confidence Limits	

Effect	Point Estimate	95% Wald Confidence Limits	
Program 0 vs 1	0.210	0.070	0.633
GPA	12.664	3.387	47.351

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	88.3	Somers' D	0.768
Percent Discordant	11.5	Gamma	0.770
Percent Tied	0.2	Tau-a	0.348
Pairs	2244	c	0.884