

### The FREQ Procedure

Frequency Row Pct	Table of Sex by Survived		
	Survived		
	0	1	Total
Sex			
female	154 33.33	308 66.67	462
male	709 83.31	142 16.69	851
Total	863	450	1313

### Statistics for Table of Sex by Survived

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	0.1001	0.0769	0.1304
Relative Risk (Column 1)	0.4001	0.3505	0.4567
Relative Risk (Column 2)	3.9953	3.3931	4.7044

**Sample Size = 1313**

## The LOGISTIC Procedure

Model Information	
Data Set	INTRO.TITANIC
Response Variable	Survived
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	1313
Number of Observations Used	1313

Response Profile		
Ordered Value	Survived	Total Frequency
1	0	863
2	1	450

Probability modeled is Survived='0'.

Class Level Information		
Class	Value	Design Variables
Sex	female	1
	male	-1

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	1690.065	1359.531
SC	1695.245	1369.891
-2 Log L	1688.065	1355.531

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	332.5344	1	<.0001
Score	332.0570	1	<.0001
Wald	291.0644	1	<.0001

### The LOGISTIC Procedure

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Sex	1	291.0644	<.0001

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.4574	0.0674	46.0047	<.0001
Sex	female	1	-1.1506	0.0674	291.0644	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Sex female vs male	0.100	0.077	0.130

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	56.2	Somers' D	0.506
Percent Discordant	5.6	Gamma	0.818
Percent Tied	38.1	Tau-a	0.228
Pairs	388350	c	0.753

### The FREQ Procedure

Frequency  
Row Pct

Table of PClass by Survived			
PClass	Survived		
	0	1	Total
1st	129 40.06	193 59.94	322
2nd	161 57.50	119 42.50	280
3rd	573 80.59	138 19.41	711
Total	863	450	1313

## The LOGISTIC Procedure

Model Information	
Data Set	INTRO.TITANIC
Response Variable	Survived
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	1313
Number of Observations Used	1313

Response Profile		
Ordered Value	Survived	Total Frequency
1	0	863
2	1	450

Probability modeled is Survived='0'.

Class Level Information			
Class	Value	Design Variables	
PClass	1st	1	0
	2nd	0	1
	3rd	-1	-1

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	1690.065	1521.191
SC	1695.245	1536.731
-2 Log L	1688.065	1515.191

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	172.8740	2	<.0001
Score	172.2991	2	<.0001
Wald	159.1198	2	<.0001

### The LOGISTIC Procedure

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
PClass	2	159.1198	<.0001

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.4410	0.0637	47.9048	<.0001
PClass	1st	1	-0.8439	0.0915	85.0729	<.0001
PClass	2nd	1	-0.1387	0.0945	2.1548	0.1421

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
PClass 1st vs 3rd	0.161	0.120	0.215
PClass 2nd vs 3rd	0.326	0.241	0.440

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	54.0	Somers' D	0.398
Percent Discordant	14.3	Gamma	0.582
Percent Tied	31.7	Tau-a	0.179
Pairs	388350	c	0.699

### The FREQ Procedure

Frequency Row Pct	Table of child by Survived			
	child	Survived		
		0	1	Total
0	358 61.30	226 38.70	584	
1	505 69.27	224 30.73	729	
Total	863	450	1313	

### Statistics for Table of child by Survived

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	0.7026	0.5588	0.8835
Relative Risk (Column 1)	0.8849	0.8164	0.9592
Relative Risk (Column 2)	1.2594	1.0847	1.4623

**Sample Size = 1313**

### The LOGISTIC Procedure

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

Number of Observations Read	1313
Number of Observations Used	1313

Response Profile		
Ordered Value	Survived	Total Frequency
1	0	863
2	1	450

Probability modeled is Survived='0'.

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

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	1690.065	1682.940
SC	1695.245	1693.300
-2 Log L	1688.065	1678.940

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	9.1251	1	0.0025
Score	9.1469	1	0.0025
Wald	9.1160	1	0.0025



### The LOGISTIC Procedure

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
child	1	9.1160	0.0025

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.6365	0.0584	118.5931	<.0001
child	0	1	-0.1765	0.0584	9.1160	0.0025

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
child 0 vs 1	0.703	0.559	0.884

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	29.4	Somers' D	0.087
Percent Discordant	20.6	Gamma	0.175
Percent Tied	50.0	Tau-a	0.039
Pairs	388350	c	0.544