

The LOGISTIC Procedure

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

| | |
|-----------------------------|-----|
| Number of Observations Read | 891 |
| Number of Observations Used | 891 |

| Response Profile | | |
|------------------|----------|-----------------|
| Ordered Value | Survived | Total Frequency |
| 1 | 0 | 549 |
| 2 | 1 | 342 |

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 | 1188.655 | 826.151 |
| SC | 1193.447 | 845.320 |
| -2 Log L | 1186.655 | 818.151 |

| Testing Global Null Hypothesis: BETA=0 | | | |
|--|------------|----|------------|
| Test | Chi-Square | DF | Pr > ChiSq |
| Likelihood Ratio | 368.5043 | 3 | <.0001 |
| Score | 333.3887 | 3 | <.0001 |
| Wald | 236.4117 | 3 | <.0001 |

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| Type 3 Analysis of Effects | | | |
|----------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| Age | 1 | 8.8482 | 0.0029 |
| Sex | 1 | 203.1690 | <.0001 |
| Pclass | 1 | 87.1852 | <.0001 |

| Analysis of Maximum Likelihood Estimates | | | | | | |
|--|--------|----|----------|-------------------|--------------------|------------|
| Parameter | | DF | Estimate | Standard Error | Wald Chi-Square | Pr > ChiSq |
| Intercept | | 1 | -2.6476 | 0.3465 | 58.3951 | <.0001 |
| Age | | 1 | 0.0158 | 0.00531 | 8.8482 | 0.0029 |
| Sex | female | 1 | -1.3158 | 0.0923 | 203.1690 | <.0001 |
| Pclass | | 1 | 1.0949 | 0.1173 | 87.1852 | <.0001 |

| Odds Ratio Estimates | | | |
|----------------------|-------------------|-------------------------------|-------|
| Effect | Point Estimate | 95% Wald Confidence Limits | |
| Age | 1.016 | 1.005 | 1.027 |
| Sex female vs male | 0.072 | 0.050 | 0.103 |
| Pclass | 2.989 | 2.375 | 3.761 |

| Association of Predicted Probabilities and Observed Responses | | | |
|--|--------|-----------|-------|
| Percent Concordant | 83.5 | Somers' D | 0.679 |
| Percent Discordant | 15.6 | Gamma | 0.685 |
| Percent Tied | 0.8 | Tau-a | 0.322 |
| Pairs | 187758 | c | 0.839 |