| Model Information | | | | | |
|---------------------------|------------------|--|--|--|--|
| Data Set | MIS581.NO2 | | | | |
| Response Variable | SupOppRedStraws | | | | |
| Number of Response Levels | 2 | | | | |
| Model | binary logit | | | | |
| Optimization Technique | Fisher's scoring | | | | |

| Number of Observations Read | 16616 |
|-----------------------------|-------|
| Number of Observations Used | 16610 |

| Response Profile | | | | | | |
|------------------|-----------------|--------------------|--|--|--|--|
| Ordered Value | SupOppRedStraws | Total Frequency | | | | |
| 1 | Oppose | 773 | | | | |
| 2 | Support | 15837 | | | | |

Probability modeled is SupOppRedStraws='Support'.

Note: 6 observations were deleted due to missing values for the response or explanatory variables.

| | Class Level Information | | | | | | | | | | | |
|--------|-------------------------|---|---|---|----|------|------|------|-----|---|---|---|
| Class | Value | | | | De | sigr | ı Va | riab | les | | | |
| Age | 15-24 years | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 25-34 years | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 35-44 years | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 45-54 years | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 55-64 years | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 65-74 years | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 75-84 years | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 85-94 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | 95 years an | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | No Response | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Under 15 ye | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Gender | Female | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | Male | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | | | |
| | No Res | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | | | |
| | Non-bi | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | |
| | Other | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | | | |
| | Trans | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | |
| | Two-sp | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | | | |
| Income | \$100,000-\$149,999 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | \$20,000-\$39,999 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | \$40,000-\$59,999 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | \$5,000-\$19,999 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | |
| | \$60,000-\$79,999 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | |
| | \$80,000-\$99,999 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | |
| | 150,000 and over | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | |
| | Prefer not to answer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | |
| | Under \$5,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | |

Model Convergence Status

Model Convergence Status

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

| Model Fit Statistics | | | | | | | |
|---|----------|----------|--|--|--|--|--|
| Criterion Intercept Only Intercept and Covariates | | | | | | | |
| AIC | 6253.780 | 6002.389 | | | | | |
| SC | 6261.498 | 6195.333 | | | | | |
| -2 Log L | 6251.780 | 5952.389 | | | | | |

| Testing Global Null Hypothesis: BETA=0 | | | | | | | | |
|--|----------|----|--------|--|--|--|--|--|
| Test Chi-Square DF Pr > ChiSc | | | | | | | | |
| Likelihood Ratio | 299.3912 | 24 | <.0001 | | | | | |
| Score | 406.2759 | 24 | <.0001 | | | | | |
| Wald | 329.9413 | 24 | <.0001 | | | | | |

| Type 3 Analysis of Effects | | | | | | | | | |
|----------------------------|-------------------------------|----------|--------|--|--|--|--|--|--|
| Effect | Wald DF Chi-Square Pr > ChiSq | | | | | | | | |
| Age | 10 | 25.1129 | 0.0051 | | | | | | |
| Gender | 6 | 252.5952 | <.0001 | | | | | | |
| Income | 8 | 33.8461 | <.0001 | | | | | | |

| | <u>, </u> | | | ood Estima | | |
|-----------|--|----|----------|-------------------|--------------------|------------|
| Parameter | | DF | Estimate | Standard Error | Wald Chi-Square | Pr > ChiSo |
| Intercept | | 1 | 0.4585 | 0.8169 | 0.3150 | 0.5746 |
| Age | 15-24 years | 1 | 0.4925 | 0.4112 | 1.4349 | 0.2310 |
| Age | 25-34 years | 1 | 0.0289 | 0.3922 | 0.0054 | 0.9413 |
| Age | 35-44 years | 1 | -0.0562 | 0.3926 | 0.0205 | 0.8862 |
| Age | 45-54 years | 1 | -0.1686 | 0.3961 | 0.1811 | 0.670 |
| Age | 55-64 years | 1 | -0.2835 | 0.3978 | 0.5079 | 0.476 |
| Age | 65-74 years | 1 | 0.1214 | 0.4135 | 0.0861 | 0.769 |
| Age | 75-84 years | 1 | 0.7448 | 0.5429 | 1.8822 | 0.170 |
| Age | 85-94 years | 1 | 0.5549 | 1.0872 | 0.2605 | 0.609 |
| Age | 95 years an | 1 | 0.3475 | 1.1977 | 0.0842 | 0.771 |
| Age | No Response | 1 | -0.1167 | 0.5224 | 0.0499 | 0.823 |
| Age | Under 15 ye | 0 | 0 | | | |
| Gender | Female | 1 | 2.3710 | 0.6852 | 11.9746 | 0.000 |
| Gender | Male | 1 | 1.5233 | 0.6855 | 4.9375 | 0.026 |
| Gender | No Res | 1 | 1.7029 | 0.7656 | 4.9476 | 0.026 |
| Gender | Non-bi | 1 | 0.5079 | 0.7244 | 0.4915 | 0.483 |
| Gender | Other | 1 | 0.1282 | 0.7077 | 0.0328 | 0.856 |
| Gender | Trans | 1 | 0.6244 | 0.8413 | 0.5508 | 0.458 |
| Gender | Two-sp | 0 | 0 | | | |
| Income | \$100,000-\$149,999 | 1 | 0.6540 | 0.2866 | 5.2056 | 0.022 |
| Income | \$20,000-\$39,999 | 1 | 0.6433 | 0.3086 | 4.3453 | 0.037 |
| Income | \$40,000-\$59,999 | 1 | 0.8111 | 0.3030 | 7.1655 | 0.007 |
| Income | \$5,000-\$19,999 | 1 | 0.1700 | 0.3249 | 0.2738 | 0.600 |
| Income | \$60,000-\$79,999 | 1 | 0.6218 | 0.2970 | 4.3825 | 0.036 |
| Income | \$80,000-\$99,999 | 1 | 0.6652 | 0.2992 | 4.9431 | 0.026 |
| Income | 150,000 and over | 1 | 0.9030 | 0.2916 | 9,5870 | 0.0020 |

| Analysis of Maximum Likelihood Estimates | | | | | | | | | |
|---|----------------------|---|--------|--------|--------|--------|--|--|--|
| Parameter DF Estimate Error Chi-Square Pr > ChiSq | | | | | | | | | |
| Income | Prefer not to answer | 1 | 0.2747 | 0.2876 | 0.9125 | 0.3395 | | | |
| Income | Under \$5,000 | 0 | 0 | | | | | | |

| Odds Ratio Estimates | | | | | | |
|--|-----------------------------|-------|--------|--|--|--|
| Effect | 95% Point Estimate Confiden | | | | | |
| Age 15-24 years vs Under 15 ye | 1.636 | 0.731 | 3.664 | | | |
| Age 25-34 years vs Under 15 ye | 1.029 | 0.477 | 2.220 | | | |
| Age 35-44 years vs Under 15 ye | 0.945 | 0.438 | 2.041 | | | |
| Age 45-54 years vs Under 15 ye | 0.845 | 0.389 | 1,836 | | | |
| Age 55-64 years vs Under 15 ye | 0.753 | 0.345 | 1.642 | | | |
| Age 65-74 years vs Under 15 ye | 1.129 | 0.502 | 2,539 | | | |
| Age 75-84 years vs Under 15 ye | 2.106 | 0.727 | 6.103 | | | |
| Age 85-94 years vs Under 15 ye | 1.742 | 0.207 | 14.669 | | | |
| Age 95 years an vs Under 15 ye | 1.415 | 0.135 | 14.805 | | | |
| Age No Response vs Under 15 ye | 0.890 | 0.320 | 2.477 | | | |
| Gender Female vs Two-sp | 10.708 | 2.796 | 41.013 | | | |
| Gender Male vs Two-sp | 4.587 | 1.197 | 17.583 | | | |
| Gender No Res vs Two-sp | 5.490 | 1.224 | 24.617 | | | |
| Gender Non-bi vs Two-sp | 1.662 | 0.402 | 6.874 | | | |
| Gender Other vs Two-sp | 1.137 | 0.284 | 4.550 | | | |
| Gender Trans vs Two-sp | 1.867 | 0.359 | 9.712 | | | |
| Income \$100,000-\$149,999 vs Under \$5,000 | 1.923 | 1.097 | 3.373 | | | |
| Income \$20,000-\$39,999 vs Under \$5,000 | 1.903 | 1.039 | 3.484 | | | |
| Income \$40,000-\$59,999 vs Under \$5,000 | 2.250 | 1.243 | 4.075 | | | |
| Income \$5,000-\$19,999 vs Under \$5,000 | 1.185 | 0.627 | 2.241 | | | |
| Income \$60,000-\$79,999 vs Under \$5,000 | 1.862 | 1.040 | 3.334 | | | |
| Income \$80,000-\$99,999 vs Under \$5,000 | 1.945 | 1.082 | 3.496 | | | |
| Income 150,000 and over vs Under \$5,000 | 2.467 | 1.393 | 4.369 | | | |
| Income Prefer not to answer vs Under \$5,000 | 1.316 | 0.749 | 2.312 | | | |

| Association of Predicted Probabilities and Observed Responses | | | | | | | | |
|---|-------------------------------|-------|-------|--|--|--|--|--|
| Percent Concordant | t 66.0 Somers' D 0.334 | | | | | | | |
| Percent Discordant | 32.6 | Gamma | 0.339 | | | | | |
| Percent Tied | 1.5 | Tau-a | 0.030 | | | | | |
| Pairs | 12242001 | С | 0.667 | | | | | |