```
HILOGLINEAR Rel(1 2) Diff(1 2) Lan(1 2)
  /CRITERIA ITERATION(20) DELTA(.5)
  /PRINT=FREQ RESID ESTIM
  /DESIGN.
```

Hierarchical Loglinear Analysis

Notes

Output Created		24-APR-2014 13:22:57
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	Freq
	Split File	<none>
	N of Rows in Working Data File	8
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		HILOGLINEAR Rel(1 2) Diff(1 2) Lan(1 2) /CRITERIA ITERATION (20) DELTA(.5) /PRINT=FREQ RESID ESTIM /DESIGN.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

[DataSet0]

Warnings

For Design 1, .500 has been added to all observed cells for this saturated model, This value may be changed by using the CRITERIA = DELTA subcommand.

Data Information

		N
Cases	Valid	8
	Out of Range[a]	0
	Missing	0
	Weighted Valid	851
Categories	Rel	2
	Diff	2
	Lan	2

a. Cases rejected because of out of range factor values.

Design 1

Convergence Information

Generating Class	Rel*Diff*Lan
Number of Iterations	1
Max. Difference between Observed and Fitted Marginals	.000
Convergence Criterion	.487

Cell Counts and Residuals

			Observed		Expected			
Rel	Diff	Lan	Count[a]	%	Count	%	Residuals	Std. Residuals
1.00	1.00	1.00	76.500	9.0%	76.500	9.0%	.000	.000
		2.00	33.500	3.9%	33.500	3.9%	.000	.000
	2.00	1.00	487.500	57.3%	487.500	57.3%	.000	.000
		2.00	12.500	1.5%	12.500	1.5%	.000	.000
2.00	1.00	1.00	105.500	12.4%	105.500	12.4%	.000	.000
		2.00	69.500	8.2%	69.500	8.2%	.000	.000
	2.00	1.00	66.500	7.8%	66.500	7.8%	.000	.000
		2.00	3.500	0.4%	3.500	0.4%	.000	.000

a. For saturated models, .500 has been added to all observed cells.

Goodness-of-Fit Tests

	Chi-Square	df	Sig.
Likelihood Ratio	.000	0	.
Pearson	.000	0	.

K-Way and Higher-Order Effects

	K	df	Likelihood Ratio		Pearson	
			Chi-Square	Sig.	Chi-Square	Sig.
K-way and Higher Order Effects[a]	1	7	1154.129	.000	1633.879	.000
	2	4	396.766	.000	519.719	.000
	3	1	.076	.783	.078	.780
K-way Effects[b]	1	3	757.363	.000	1114.160	.000
	2	3	396.690	.000	519.640	.000
	3	1	.076	.783	.078	.780

K-Way and Higher-Order Effects

	K	Number of Iterations
K-way and Higher Order Effects[a]	1	0
	2	2
	3	6
K-way Effects[b]	1	0
	2	0
	3	0

a. Tests that k-way and higher order effects are zero.

b. Tests that k-way effects are zero.

Parameter Estimates

Effect	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Rel*Diff*Lan	1	-.039	.084	-.463	.643	-.203	.125
Rel*Diff	1	-.540	.084	-6.437	.000	-.704	-.375
Rel*Lan	1	.141	.084	1.682	.093	-.023	.305
Diff*Lan	1	-.671	.084	-8.001	.000	-.835	-.506
Rel	1	.277	.084	3.302	.001	.112	.441
Diff	1	.323	.084	3.854	.000	.159	.487
Lan	1	.981	.084	11.709	.000	.817	1.146