

## Log Linear Analysis for an A x B x C Classification Table

The three-way classification table can result in a number of linear models to describe the log of the observed frequencies as a function of row, column, slice, two-way interactions and the three-way interaction. When you select this option you see the dialogue box shown below. Notice that the option is given for entering data directly in the box if preferred. We will use the ABCLogLinData.LAZ file to demonstrate.

Log Linear Analysis for AxBxC Classification Table

Enter Data From:

☒ File Data in the Main Grid  
☐ Data Entered on this Form

Row Variable  
Row

Column Variable  
Col

Slice Variable  
Slice

Frequency Variable  
X

Reset Cancel Compute Return

### Log-Linear Analysis of a Three Dimension Table

#### Observed Frequencies

1	1	1	6.000
1	1	2	9.000
1	1	3	12.000
1	2	1	15.000
1	2	2	12.000
1	2	3	9.000
2	1	1	6.000
2	1	2	15.000
2	1	3	6.000
2	2	1	15.000
2	2	2	18.000
2	2	3	24.000

#### Totals for Dimension A

Row 1 63.000

Row 2 84.000

#### Totals for Dimension B

Col 1 54.000

Col 2 93.000

#### Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

Sub-matrix AB

ROW/COL	1	2
1	27.000	36.000
2	27.000	57.000

Sub-matrix AC

ROW/COL	1	2	3
1	21.000	21.000	21.000
2	21.000	33.000	30.000

Sub-matrix BC

ROW/COL	1	2	3
1	12.000	24.000	18.000
2	30.000	30.000	33.000

Saturated Model

Expected Frequencies

1	1	1	6.000
1	1	2	9.000
1	1	3	12.000
1	2	1	15.000
1	2	2	12.000
1	2	3	9.000
2	1	1	6.000
2	1	2	15.000
2	1	3	6.000
2	2	1	15.000
2	2	2	18.000
2	2	3	24.000

Totals for Dimension A

Row 1 63.000

Row 2 84.000

Totals for Dimension B

Col 1 54.000

Col 2 93.000

Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

Log Frequencies

1	1	1	1.792
1	1	2	2.197
1	1	3	2.485
1	2	1	2.708
1	2	2	2.485
1	2	3	2.197
2	1	1	1.792
2	1	2	2.708
2	1	3	1.792
2	2	1	2.708
2	2	2	2.890
2	2	3	3.178

Totals for Dimension A

Row 1 2.311

Row 2 2.511

Totals for Dimension B

Col 1 2.128

Col 2 2.694

Totals for Dimension C

Slice 1 2.250

Slice 2 2.570

Slice 3 2.413

Cell Parameters

ROW COL SLICE MU LAMBDA A LAMBDA B LAMBDA C

			LAMBDA AB	LAMBDA AC	LAMBDA BC	LAMBDA ABC
1	1	1	2.411 0.131	-0.100 0.100	-0.283 -0.175	-0.161 -0.131
1	1	2	2.411 0.131	-0.100 -0.129	-0.283 0.166	0.159 -0.157
1	1	3	2.411 0.131	-0.100 0.028	-0.283 0.009	0.002 0.288
1	2	1	2.411 -0.131	-0.100 0.100	0.283 0.175	-0.161 0.131
1	2	2	2.411 -0.131	-0.100 -0.129	0.283 -0.166	0.159 0.157
1	2	3	2.411 -0.131	-0.100 0.028	0.283 -0.009	0.002 -0.288
2	1	1	2.411 -0.131	0.100 -0.100	-0.283 -0.175	-0.161 0.131
2	1	2	2.411 -0.131	0.100 0.129	-0.283 0.166	0.159 0.157
2	1	3	2.411 -0.131	0.100 -0.028	-0.283 0.009	0.002 -0.288
2	2	1	2.411 0.131	0.100 -0.100	0.283 0.175	-0.161 -0.131
2	2	2	2.411 0.131	0.100 0.129	0.283 -0.166	0.159 -0.157
2	2	3	2.411 0.131	0.100 -0.028	0.283 -0.009	0.002 0.288

G squared statistic for model fit = 0.000 D.F. = 0

Model of Independence

Expected Frequencies

1	1	1	6.612
1	1	2	8.501
1	1	3	8.029
1	2	1	11.388
1	2	2	14.641
1	2	3	13.828
2	1	1	8.816
2	1	2	11.335
2	1	3	10.706
2	2	1	15.184
2	2	2	19.522
2	2	3	18.437

Totals for Dimension A

Row 1 63.000

Row 2 84.000

Totals for Dimension B

Col 1 54.000

Col 2 93.000

Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

Log Frequencies

1	1	1	1.889
1	1	2	2.140
1	1	3	2.083

1	2	1	2.433
1	2	2	2.684
1	2	3	2.627
2	1	1	2.177
2	1	2	2.428
2	1	3	2.371
2	2	1	2.720
2	2	2	2.972
2	2	3	2.914

Totals for Dimension A

Row 1	2.309
Row 2	2.597

Totals for Dimension B

Col 1	2.181
Col 2	2.725

Totals for Dimension C

Slice 1	2.305
Slice 2	2.556
Slice 3	2.499

Cell Parameters

ROW	COL	SLICE	MU LAMBDA AB	LAMBDA A LAMBDA AC	LAMBDA B LAMBDA BC	LAMBDA C LAMBDA ABC
1	1	1	2.453 0.000	-0.144 0.000	-0.272 0.000	-0.148 -0.000
1	1	2	2.453 0.000	-0.144 -0.000	-0.272 0.000	0.103 0.000
1	1	3	2.453 0.000	-0.144 0.000	-0.272 0.000	0.046 0.000
1	2	1	2.453 0.000	-0.144 0.000	0.272 0.000	-0.148 0.000
1	2	2	2.453 0.000	-0.144 -0.000	0.272 -0.000	0.103 0.000
1	2	3	2.453 0.000	-0.144 0.000	0.272 -0.000	0.046 0.000
2	1	1	2.453 0.000	0.144 0.000	-0.272 0.000	-0.148 -0.000
2	1	2	2.453 0.000	0.144 -0.000	-0.272 0.000	0.103 0.000
2	1	3	2.453 0.000	0.144 0.000	-0.272 0.000	0.046 -0.000
2	2	1	2.453 -0.000	0.144 0.000	0.272 0.000	-0.148 0.000
2	2	2	2.453 -0.000	0.144 -0.000	0.272 -0.000	0.103 0.000
2	2	3	2.453 -0.000	0.144 0.000	0.272 -0.000	0.046 0.000

G squared statistic for model fit = 11.471 D.F. = 7

No AB Effect

Expected Frequencies

1	1	1	6.000
1	1	2	9.333
1	1	3	7.412
1	2	1	15.000
1	2	2	11.667

1	2	3	13.588
2	1	1	6.000
2	1	2	14.667
2	1	3	10.588
2	2	1	15.000
2	2	2	18.333
2	2	3	19.412

Totals for Dimension A

Row 1	63.000
Row 2	84.000

Totals for Dimension B

Col 1	54.000
Col 2	93.000

Totals for Dimension C

Slice 1	42.000
Slice 2	54.000
Slice 3	51.000

Log Frequencies

1	1	1	1.792
1	1	2	2.234
1	1	3	2.003
1	2	1	2.708
1	2	2	2.457
1	2	3	2.609
2	1	1	1.792
2	1	2	2.686
2	1	3	2.360
2	2	1	2.708
2	2	2	2.909
2	2	3	2.966

Totals for Dimension A

Row 1	2.300
Row 2	2.570

Totals for Dimension B

Col 1	2.144
Col 2	2.726

Totals for Dimension C

Slice 1	2.250
Slice 2	2.571
Slice 3	2.484

Cell Parameters

ROW	COL	SLICE	MU LAMBDA AB	LAMBDA A LAMBDA AC	LAMBDA B LAMBDA BC	LAMBDA C LAMBDA ABC
1	1	1	2.435 0.000	-0.135 0.135	-0.291 -0.167	-0.185 0.000
1	1	2	2.435 0.000	-0.135 -0.091	-0.291 0.179	0.136 0.000
1	1	3	2.435 0.000	-0.135 -0.044	-0.291 -0.012	0.049 0.000
1	2	1	2.435 0.000	-0.135 0.135	0.291 0.167	-0.185 0.000
1	2	2	2.435 0.000	-0.135 -0.091	0.291 -0.179	0.136 0.000
1	2	3	2.435 0.000	-0.135 -0.044	0.291 0.012	0.049 0.000
2	1	1	2.435 0.000	0.135 -0.135	-0.291 -0.167	-0.185 -0.000
2	1	2	2.435 0.000	0.135 0.091	-0.291 0.179	0.136 -0.000
2	1	3	2.435	0.135	-0.291	0.049

			0.000	0.044	-0.012	-0.000
2	2	1	2.435	0.135	0.291	-0.185
			0.000	-0.135	0.167	0.000
2	2	2	2.435	0.135	0.291	0.136
			0.000	0.091	-0.179	0.000
2	2	3	2.435	0.135	0.291	0.049
			0.000	0.044	0.012	0.000

G squared statistic for model fit = 7.552 D.F. = 3

No AC Effect

#### Expected Frequencies

1	1	1	6.000
1	1	2	12.000
1	1	3	9.000
1	2	1	11.613
1	2	2	11.613
1	2	3	12.774
2	1	1	6.000
2	1	2	12.000
2	1	3	9.000
2	2	1	18.387
2	2	2	18.387
2	2	3	20.226

Totals for Dimension A

Row 1 63.000

Row 2 84.000

Totals for Dimension B

Col 1 54.000

Col 2 93.000

Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

#### Log Frequencies

1	1	1	1.792
1	1	2	2.485
1	1	3	2.197
1	2	1	2.452
1	2	2	2.452
1	2	3	2.547
2	1	1	1.792
2	1	2	2.485
2	1	3	2.197
2	2	1	2.912
2	2	2	2.912
2	2	3	3.007

Totals for Dimension A

Row 1 2.321

Row 2 2.551

Totals for Dimension B

Col 1 2.158

Col 2 2.714

Totals for Dimension C

Slice 1 2.237

Slice 2 2.583

Slice 3 2.487

#### Cell Parameters

ROW	COL	SLICE	MU	LAMBDA A	LAMBDA B	LAMBDA C
			LAMBDA AB	LAMBDA AC	LAMBDA BC	LAMBDA ABC
1	1	1	2.436	-0.115	-0.278	-0.199
			0.115	0.000	-0.167	0.000

1	1	2	2.436 0.115	-0.115 0.000	-0.278 0.179	0.148 0.000
1	1	3	2.436 0.115	-0.115 -0.000	-0.278 -0.012	0.051 0.000
1	2	1	2.436 -0.115	-0.115 0.000	0.278 0.167	-0.199 0.000
1	2	2	2.436 -0.115	-0.115 0.000	0.278 -0.179	0.148 0.000
1	2	3	2.436 -0.115	-0.115 -0.000	0.278 0.012	0.051 0.000
2	1	1	2.436 -0.115	0.115 0.000	-0.278 -0.167	-0.199 -0.000
2	1	2	2.436 -0.115	0.115 0.000	-0.278 0.179	0.148 -0.000
2	1	3	2.436 -0.115	0.115 0.000	-0.278 -0.012	0.051 -0.000
2	2	1	2.436 0.115	0.115 0.000	0.278 0.167	-0.199 -0.000
2	2	2	2.436 0.115	0.115 0.000	0.278 -0.179	0.148 -0.000
2	2	3	2.436 0.115	0.115 0.000	0.278 0.012	0.051 -0.000

G squared statistic for model fit = 7.055 D.F. = 4

No BC Effect

Expected Frequencies

1	1	1	9.000
1	1	2	9.000
1	1	3	9.000
1	2	1	12.000
1	2	2	12.000
1	2	3	12.000
2	1	1	6.750
2	1	2	10.607
2	1	3	9.643
2	2	1	14.250
2	2	2	22.393
2	2	3	20.357

Totals for Dimension A

Row 1 63.000

Row 2 84.000

Totals for Dimension B

Col 1 54.000

Col 2 93.000

Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

Log Frequencies

1	1	1	2.197
1	1	2	2.197
1	1	3	2.197
1	2	1	2.485
1	2	2	2.485
1	2	3	2.485
2	1	1	1.910
2	1	2	2.362

2	1	3	2.266
2	2	1	2.657
2	2	2	3.109
2	2	3	3.013

Totals for Dimension A  
Row 1 2.341  
Row 2 2.553  
Totals for Dimension B  
Col 1 2.188  
Col 2 2.706  
Totals for Dimension C  
Slice 1 2.312  
Slice 2 2.538  
Slice 3 2.490

Cell Parameters

ROW	COL	SLICE	MU LAMBDA AB	LAMBDA A LAMBDA AC	LAMBDA B LAMBDA BC	LAMBDA C LAMBDA ABC
1	1	1	2.447 0.115	-0.106 0.135	-0.259 0.000	-0.135 -0.000
1	1	2	2.447 0.115	-0.106 -0.091	-0.259 0.000	0.091 -0.000
1	1	3	2.447 0.115	-0.106 -0.044	-0.259 -0.000	0.044 0.000
1	2	1	2.447 -0.115	-0.106 0.135	0.259 -0.000	-0.135 0.000
1	2	2	2.447 -0.115	-0.106 -0.091	0.259 -0.000	0.091 0.000
1	2	3	2.447 -0.115	-0.106 -0.044	0.259 -0.000	0.044 0.000
2	1	1	2.447 -0.115	0.106 -0.135	-0.259 0.000	-0.135 0.000
2	1	2	2.447 -0.115	0.106 0.091	-0.259 0.000	0.091 0.000
2	1	3	2.447 -0.115	0.106 0.044	-0.259 -0.000	0.044 0.000
2	2	1	2.447 0.115	0.106 -0.135	0.259 -0.000	-0.135 0.000
2	2	2	2.447 0.115	0.106 0.091	0.259 -0.000	0.091 0.000
2	2	3	2.447 0.115	0.106 0.044	0.259 -0.000	0.044 0.000

G squared statistic for model fit = 8.423 D.F. = 4

Model of No Slice (C) effect

Expected Frequencies

1	1	1	7.714
1	1	2	7.714
1	1	3	7.714
1	2	1	13.286
1	2	2	13.286
1	2	3	13.286
2	1	1	10.286
2	1	2	10.286
2	1	3	10.286
2	2	1	17.714



2	2	2	17.714
2	2	3	17.714
Totals for Dimension A			
Row 1	63.000		
Row 2	84.000		
Totals for Dimension B			
Col 1	54.000		
Col 2	93.000		
Totals for Dimension C			
Slice 1	49.000		
Slice 2	49.000		
Slice 3	49.000		

Log Frequencies

1	1	1	2.043
1	1	2	2.043
1	1	3	2.043
1	2	1	2.587
1	2	2	2.587
1	2	3	2.587
2	1	1	2.331
2	1	2	2.331
2	1	3	2.331
2	2	1	2.874
2	2	2	2.874
2	2	3	2.874
Totals for Dimension A			
Row 1	2.315		
Row 2	2.603		
Totals for Dimension B			
Col 1	2.187		
Col 2	2.731		
Totals for Dimension C			
Slice 1	2.459		
Slice 2	2.459		
Slice 3	2.459		

Cell Parameters

ROW	COL	SLICE	MU LAMBDA AB	LAMBDA A LAMBDA AC	LAMBDA B LAMBDA BC	LAMBDA C LAMBDA ABC
1	1	1	2.459 0.000	-0.144 0.000	-0.272 0.000	0.000 -0.000
1	1	2	2.459 0.000	-0.144 0.000	-0.272 0.000	0.000 -0.000
1	1	3	2.459 0.000	-0.144 0.000	-0.272 0.000	0.000 -0.000
1	2	1	2.459 0.000	-0.144 0.000	0.272 0.000	0.000 0.000
1	2	2	2.459 0.000	-0.144 0.000	0.272 0.000	0.000 0.000
1	2	3	2.459 0.000	-0.144 0.000	0.272 0.000	0.000 0.000
2	1	1	2.459 0.000	0.144 0.000	-0.272 0.000	0.000 -0.000
2	1	2	2.459 0.000	0.144 0.000	-0.272 0.000	0.000 -0.000
2	1	3	2.459 0.000	0.144 0.000	-0.272 0.000	0.000 -0.000
2	2	1	2.459 -0.000	0.144 0.000	0.272 0.000	0.000 0.000

2	2	2	2.459	0.144	0.272	0.000
			-0.000	0.000	0.000	0.000
2	2	3	2.459	0.144	0.272	0.000
			-0.000	0.000	0.000	0.000

G squared statistic for model fit = 13.097 D.F. = 9

Model of no Column (B) effect

#### Expected Frequencies

1	1	1	9.000
1	1	2	11.571
1	1	3	10.929
1	2	1	9.000
1	2	2	11.571
1	2	3	10.929
2	1	1	12.000
2	1	2	15.429
2	1	3	14.571
2	2	1	12.000
2	2	2	15.429
2	2	3	14.571

#### Totals for Dimension A

Row 1 63.000

Row 2 84.000

#### Totals for Dimension B

Col 1 73.500

Col 2 73.500

#### Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

#### Log Frequencies

1	1	1	2.197
1	1	2	2.449
1	1	3	2.391
1	2	1	2.197
1	2	2	2.449
1	2	3	2.391
2	1	1	2.485
2	1	2	2.736
2	1	3	2.679
2	2	1	2.485
2	2	2	2.736
2	2	3	2.679

#### Totals for Dimension A

Row 1 2.346

Row 2 2.633

#### Totals for Dimension B

Col 1 2.490

Col 2 2.490

#### Totals for Dimension C

Slice 1 2.341

Slice 2 2.592

Slice 3 2.535

#### Cell Parameters

ROW	COL	SLICE	MU LAMBDA AB	LAMBDA A LAMBDA AC	LAMBDA B LAMBDA BC	LAMBDA C LAMBDA ABC
1	1	1	2.490 0.000	-0.144 0.000	-0.000 0.000	-0.148 -0.000
1	1	2	2.490 0.000	-0.144 0.000	-0.000 0.000	0.103 -0.000
1	1	3	2.490 0.000	-0.144 0.000	-0.000 0.000	0.046 -0.000

1	2	1	2.490	-0.144	-0.000	-0.148
			0.000	0.000	0.000	-0.000
1	2	2	2.490	-0.144	-0.000	0.103
			0.000	0.000	0.000	-0.000
1	2	3	2.490	-0.144	-0.000	0.046
			0.000	0.000	0.000	-0.000
2	1	1	2.490	0.144	-0.000	-0.148
			0.000	0.000	0.000	-0.000
2	1	2	2.490	0.144	-0.000	0.103
			0.000	0.000	0.000	-0.000
2	1	3	2.490	0.144	-0.000	0.046
			0.000	0.000	0.000	-0.000
2	2	1	2.490	0.144	-0.000	-0.148
			0.000	0.000	0.000	-0.000
2	2	2	2.490	0.144	-0.000	0.103
			0.000	0.000	0.000	-0.000
2	2	3	2.490	0.144	-0.000	0.046
			0.000	0.000	0.000	-0.000

G squared statistic for model fit = 21.943 D.F. = 8

Model of no Row (A) effect

Expected Frequencies

1	1	1	7.714
1	1	2	9.918
1	1	3	9.367
1	2	1	13.286
1	2	2	17.082
1	2	3	16.133
2	1	1	7.714
2	1	2	9.918
2	1	3	9.367
2	2	1	13.286
2	2	2	17.082
2	2	3	16.133

Totals for Dimension A

Row 1 73.500

Row 2 73.500

Totals for Dimension B

Col 1 54.000

Col 2 93.000

Totals for Dimension C

Slice 1 42.000

Slice 2 54.000

Slice 3 51.000

Log Frequencies

1	1	1	2.043
1	1	2	2.294
1	1	3	2.237
1	2	1	2.587
1	2	2	2.838
1	2	3	2.781
2	1	1	2.043
2	1	2	2.294
2	1	3	2.237
2	2	1	2.587
2	2	2	2.838
2	2	3	2.781

Totals for Dimension A

Row 1     2.463  
 Row 2     2.463  
 Totals for Dimension B  
 Col 1     2.192  
 Col 2     2.735  
 Totals for Dimension C  
 Slice 1    2.315  
 Slice 2    2.566  
 Slice 3    2.509

Cell Parameters							
ROW	COL	SLICE	MU	LAMBDA A	LAMBDA B	LAMBDA C	
			LAMBDA AB	LAMBDA AC	LAMBDA BC	LAMBDA ABC	
1	1	1	2.463 0.000	0.000 -0.000	-0.272 0.000	-0.148 0.000	
1	1	2	2.463 0.000	0.000 -0.000	-0.272 0.000	0.103 0.000	
1	1	3	2.463 0.000	0.000 -0.000	-0.272 0.000	0.046 0.000	
1	2	1	2.463 -0.000	0.000 -0.000	0.272 0.000	-0.148 0.000	
1	2	2	2.463 -0.000	0.000 -0.000	0.272 0.000	0.103 0.000	
1	2	3	2.463 -0.000	0.000 -0.000	0.272 0.000	0.046 0.000	
2	1	1	2.463 0.000	0.000 -0.000	-0.272 0.000	-0.148 0.000	
2	1	2	2.463 0.000	0.000 -0.000	-0.272 0.000	0.103 0.000	
2	1	3	2.463 0.000	0.000 -0.000	-0.272 0.000	0.046 0.000	
2	2	1	2.463 -0.000	0.000 -0.000	0.272 0.000	-0.148 0.000	
2	2	2	2.463 -0.000	0.000 -0.000	0.272 0.000	0.103 0.000	
2	2	3	2.463 -0.000	0.000 -0.000	0.272 0.000	0.046 0.000	

G squared statistic for model fit = 14.481 D.F. = 8

Equi-probability Model

Expected Frequencies  
 1    1    1    12.250  
 1    1    2    12.250  
 1    1    3    12.250  
 1    2    1    12.250  
 1    2    2    12.250  
 1    2    3    12.250  
 2    1    1    12.250  
 2    1    2    12.250  
 2    1    3    12.250  
 2    2    1    12.250  
 2    2    2    12.250  
 2    2    3    12.250  
 Totals for Dimension A  
 Row 1    73.500  
 Row 2    73.500

Totals for Dimension B  
 Col 1 73.500  
 Col 2 73.500  
 Totals for Dimension C  
 Slice 1 49.000  
 Slice 2 49.000  
 Slice 3 49.000

Log Frequencies  
 1 1 1 2.506  
 1 1 2 2.506  
 1 1 3 2.506  
 1 2 1 2.506  
 1 2 2 2.506  
 1 2 3 2.506  
 2 1 1 2.506  
 2 1 2 2.506  
 2 1 3 2.506  
 2 2 1 2.506  
 2 2 2 2.506  
 2 2 3 2.506

Totals for Dimension A  
 Row 1 2.506  
 Row 2 2.506  
 Totals for Dimension B  
 Col 1 2.506  
 Col 2 2.506  
 Totals for Dimension C  
 Slice 1 2.506  
 Slice 2 2.506  
 Slice 3 2.506

Cell Parameters						
ROW	COL	SLICE	MU	LAMBDA A	LAMBDA B	LAMBDA C
			LAMBDA AB	LAMBDA AC	LAMBDA BC	LAMBDA ABC
1	1	1	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
1	1	2	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
1	1	3	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
1	2	1	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
1	2	2	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
1	2	3	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
2	1	1	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
2	1	2	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
2	1	3	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
2	2	1	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
2	2	2	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
2	2	3	2.506	0.000	0.000	0.000
			0.000	0.000	0.000	0.000

G squared statistic for model fit = 26.579 D.F. = 11