3/4/25, 12:18 AM Results: Modeling.sas

The GLIMMIX Procedure

Model Information				
Data Set	WORK.GGO			
Response Variable	Value			
Response Distribution	Multinomial (ordered)			
Link Function	Cumulative Logit			
Variance Function	Default			
Variance Matrix Blocked By	newID			
Estimation Technique	Maximum Likelihood			
Likelihood Approximation	Gauss-Hermite Quadrature			
Degrees of Freedom Method	Containment			

Class Level Information					
Class Levels Values					
Attribute	6	LLL LLS LUS RLL RML RUL			
rater	2	JW VH			

Number of Observations Read	1464
Number of Observations Used	1464

	Response Profile	
Ordered Value	Value	Total Frequency
1	0	1275
2	1	169
3	2	13
4	3	6
5	10	1
The GLIMMIX procedure is modeling the pr	obabilities of levels of Value havir	ng lower Ordered Values in the Response Profile table.

Dimensions			
G-side Cov. Parameters	2		
Columns in X	10		
Columns in Z per Subject	3		
Subjects (Blocks in V)	244		
Max Obs per Subject	6		

Optimization Information				
Optimization Technique Dual Quasi-Newton				
Parameters in Optimization	11			
Lower Boundaries	2			
Upper Boundaries	0			
Fixed Effects	Not Profiled			
Starting From	GLM estimates			
Quadrature Points	7			

Iteration History							
Iteration	ation Restarts Evaluations		Objective Function	Change	Max Gradient		
0	0	4	1157.7691525		116.2874		
1	0	2	1147.6270061	10.14214643	31.71456		
2	0	4	1126.9415389	20.68546716	41.34071		
3	0	2	1115.7019932	11.23954574	18.39951		
4	0	2	1111.529629	4.17236418	14.31417		
5	0	2	1109.7571007	1.77252834	5.833595		
6	0	2	1107.7383751	2.01872559	13.68659		
7	0	2	1104.5566895	3.18168561	1.431787		
8	0	3	1103.9518358	0.60485365	2.376364		
9	0	2	1103.7777656	0.17407024	4.613528		
10	0	4	1103.1750309	0.60273466	1.165994		
11	0	3	1102.8943078	0.28072312	0.620919		
12	0	3	1102.8815039	0.01280385	0.251195		
13	0	3	1102.8749367	0.00656723	0.33329		
14	0	2	1102.867365	0.00757174	0.262596		
15	0	3	1102.8653749	0.00199006	0.136569		
16	0	3	1102.8644202	0.00095472	0.055242		
17	0	3	1102.8642492	0.00017101	0.043383		

3/4/25, 12:18 AM Results: Modeling.sas

	Iteration History							
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient			
18	0	4	1102.8636976	0.00055157	0.140059			
19	0	4	1102.8618574	0.00184022	0.115187			
20	0	4	1102.6029253	0.25893209	94.3713			
21	0	151	1102.6029253	0.00000000	61.97446			
22	0	47	1102.6029253	0.00000000	61.97446			
23	0	46	1102.6029253	-0.00000000	61.97446			

Convergence criterion (FCONV=2.220446E-16) satisfied.

Estimated G matrix is not positive definite.

Fit Statistics					
-2 Log Likelihood	1102.60				
AIC (smaller is better)	1122.60				
AICC (smaller is better)	1122.75				
BIC (smaller is better)	1157.57				
CAIC (smaller is better)	1167.57				
HQIC (smaller is better)	1136.69				

Fit Statistics for Conditional Di	stribution
-2 log L(Value r. effects)	766.18

Covariance Parameter Estimates				
Cov Parm	Standard Error			
Intercept	newID	4.0593	0.8749	
rater	newID	1.11E-12		

	Solutions for Fixed Effects							
Effect Value Attribute			Estimate	Standard Error	DF	t Value	Pr > t	
Intercept	0		2.9971	0.2760	0	10.86		
Intercept	1		6.1231	0.3946	0	15.52		
Intercept	2		7.2934	0.5146	0	14.17		
Intercept	3		9.3500	1.0849	0	8.62		
Attribute		LLL	-0.1874	0.3095	1212	-0.61	0.5449	
Attribute		LLS	0.4122	0.3364	1212	1.23	0.2206	
Attribute		LUS	0.1067	0.3286	1212	0.32	0.7454	
Attribute		RLL	-0.4564	0.2861	1212	-1.60	0.1109	
Attribute		RML	0.3861	0.3365	1212	1.15	0.2514	
Attribute		RUL	0					

	Type III Tests of Fixed Effects					
Effect	Num DF	Den DF	F Value	Pr > F		
Attribute	5	1212	2.18	0.0537		

Estimates								
Label	Estimate	Standard Error	DF	t Value	Pr > t	Alpha	Lower	Upper
RUL vs. RML	0.3861	0.3365	1212	1.15	0.2514	0.05	-0.2740	1.0463
RUL vs. RLL	-0.4564	0.2861	1212	-1.60	0.1109	0.05	-1.0177	0.1050
RUL vs. LUS	0.1067	0.3286	1212	0.32	0.7454	0.05	-0.5380	0.7515
RUL vs. LLS	0.4122	0.3364	1212	1.23	0.2206	0.05	-0.2477	1.0721
RUL vs. LLL	-0.1874	0.3095	1212	-0.61	0.5449	0.05	-0.7946	0.4198
RML vs. RLL	-0.8425	0.3218	1212	-2.62	0.0089	0.05	-1.4738	-0.2112
RML vs. LUS	-0.2794	0.3397	1212	-0.82	0.4110	0.05	-0.9459	0.3871
RML vs. LLS	0.02605	0.3485	1212	0.07	0.9404	0.05	-0.6577	0.7098
RML vs. LLL	-0.5736	0.3306	1212	-1.74	0.0830	0.05	-1.2221	0.07496
RML vs. RUL	-0.3861	0.3365	1212	-1.15	0.2514	0.05	-1.0463	0.2740
RLL vs. LUS	0.5631	0.3086	1212	1.82	0.0683	0.05	-0.04241	1.1686
RLL vs. LLS	0.8686	0.3243	1212	2.68	0.0075	0.05	0.2322	1.5049
RLL vs. LLL	0.2690	0.2976	1212	0.90	0.3663	0.05	-0.3149	0.8528
LUS vs. LLS	0.3055	0.3395	1212	0.90	0.3684	0.05	-0.3605	0.9714
LUS vs. LLL	-0.2942	0.3192	1212	-0.92	0.3570	0.05	-0.9205	0.3322
LLS vs. LLL	-0.5996	0.3322	1212	-1.81	0.0713	0.05	-1.2514	0.05212

3/4/25, 12:18 AM Results: Modeling.sas

Significant Pairwise Comparisons for ggo

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RML vs. RLL	0.0089	0.43062
RLL vs. LLS	0.0075	2.38351