The GLIMMIX Procedure

Model Information	
Data Set	WORK.BRONCH
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	492
2	1	648
3	2	210
4	3	114

The GLIMMIX procedure is modeling the probabilities of levels of Value having lower Ordered Values in the Response Profile table.

Dimensions	
G-side Cov. Parameters	2
Columns in X	9
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	10
Lower Boundaries	2
Upper Boundaries	0
Fixed Effects	Not Profiled
Starting From	GLM estimates
Quadrature Points	5

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	2996.4522553	.	407.7365
1	0	2	2907.8103551	88.64190018	129.7459
2	0	2	2857.5040028	50.30635225	79.95138
3	0	2	2804.1747742	53.32922866	29.74264
4	0	2	2801.3589683	2.81580582	59.65816
5	0	4	2788.8072604	12.55170790	15.63968
6	0	3	2782.3708828	6.43637760	13.65866
7	0	3	2779.9179603	2.45292255	4.033654
8	0	3	2779.6841733	0.23378704	1.56814
9	0	3	2779.656343	0.02783023	0.317257
10	0	3	2779.6546021	0.00174089	0.069287
11	0	3	2779.6543835	0.00021862	0.07278
12	0	2	2779.6541205	0.00026301	0.040112
13	0	3	2779.6540944	0.00002612	0.038659
14	0	2	2779.6540804	0.00001396	0.036345

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

Fit Statistics

Fit Statistics	
-2 Log Likelihood	2779.65
AIC (smaller is better)	2799.65
AICC (smaller is better)	2799.81
BIC (smaller is better)	2834.63
CAIC (smaller is better)	2844.63
HQIC (smaller is better)	2813.74

Fit Statistics for Conditional Distribution	
-2 log L(Value | r. effects)	2079.07

Covariance Parameter Estimates			
Cov Parm	Subject	Estimate	Standard Error
Intercept	newID	4.7881	3.0275
rater	newID	0.6362	2.9631

Solutions for Fixed Effects							
Effect	Value	Attribute	Estimate	Standard Error	DF	t Value	Pr > |t|
Intercept	0		-1.4536	0.2133	0	-6.81	.
Intercept	1		2.2714	0.2215	0	10.25	.
Intercept	2		4.2574	0.2543	0	16.74	.
Attribute		LLL	0.8190	0.1981	1213	4.13	<.0001
Attribute		LLS	-0.6348	0.1919	1213	-3.31	0.0010
Attribute		LUS	1.9206	0.2150	1213	8.93	<.0001
Attribute		RLL	0.2446	0.1925	1213	1.27	0.2040
Attribute		RML	-1.4288	0.1978	1213	-7.22	<.0001
Attribute		RUL	0	.	.	.	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Attribute	5	1213	49.04	<.0001

Estimates											
Label	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper	Exponentiated Estimate	Exponentiated Lower	Exponentiated Upper
RUL vs. RML	1.4538	0.1999	1213	7.27	<.0001	0.05	1.0617	1.8459	4.2793	2.8912	6.3337
RUL vs. RLL	-1.1016	0.2133	1213	-5.16	<.0001	0.05	-1.5201	-0.6830	0.3323	0.2187	0.5051
RUL vs. LUS	0.5744	0.1972	1213	2.91	0.0036	0.05	0.1875	0.9612	1.7760	1.2063	2.6148
RUL vs. LLS	2.2478	0.2084	1213	10.79	<.0001	0.05	1.8389	2.6567	9.4670	6.2898	14.2491
RUL vs. LLL	0.8190	0.1981	1213	4.13	<.0001	0.05	0.4304	1.2076	2.2682	1.5378	3.3454
RML vs. RLL	-2.5554	0.2200	1213	-11.62	<.0001	0.05	-2.9870	-2.1238	0.07766	0.05044	0.1196
RML vs. LUS	-0.8794	0.1927	1213	-4.56	<.0001	0.05	-1.2575	-0.5014	0.4150	0.2844	0.6057
RML vs. LLS	0.7940	0.1927	1213	4.12	<.0001	0.05	0.4161	1.1720	2.2123	1.5160	3.2284
RML vs. LLL	-0.6348	0.1919	1213	-3.31	0.0010	0.05	-1.0113	-0.2583	0.5300	0.3637	0.7723
RLL vs. LUS	1.6759	0.2132	1213	7.86	<.0001	0.05	1.2577	2.0942	5.3437	3.5172	8.1189
RLL vs. LLS	3.3494	0.2314	1213	14.47	<.0001	0.05	2.8954	3.8034	28.4852	18.0909	44.8519
RLL vs. LLL	1.9206	0.2150	1213	8.93	<.0001	0.05	1.4988	2.3423	6.8247	4.4762	10.4054
LUS vs. LLS	1.6735	0.1994	1213	8.39	<.0001	0.05	1.2822	2.0647	5.3306	3.6045	7.8832
LUS vs. LLL	0.2446	0.1925	1213	1.27	0.2040	0.05	-0.1330	0.6223	1.2771	0.8755	1.8631
LLS vs. LLL	-1.4288	0.1978	1213	-7.22	<.0001	0.05	-1.8169	-1.0407	0.2396	0.1625	0.3532

Significant Pairwise Comparisons for bronch

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. RML	<.0001	4.2793
RUL vs. RLL	<.0001	0.3323
RUL vs. LUS	0.0036	1.7760
RUL vs. LLS	<.0001	9.4670
RUL vs. LLL	<.0001	2.2682
RML vs. RLL	<.0001	0.0777
RML vs. LUS	<.0001	0.4150
RML vs. LLS	<.0001	2.2123
RML vs. LLL	0.0010	0.5300
RLL vs. LUS	<.0001	5.3437
RLL vs. LLS	<.0001	28.4852

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RLL vs. LLL	<.0001	6.8247
LUS vs. LLS	<.0001	5.3306
LLS vs. LLL	<.0001	0.2396