

The GLIMMIX Procedure

Model Information	
Data Set	WORK.TIB
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	391
2	1	818
3	2	217
4	3	38
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	2738.2704676	.	383.369
1	0	2	2662.4802861	75.79018143	105.2574
2	0	3	2620.6312827	41.84900346	51.26399
3	0	2	2604.126854	16.50442871	70.51293
4	0	2	2586.042498	18.08435595	13.79479
5	0	4	2581.108897	4.93360105	15.50469
6	0	2	2579.3785782	1.73031878	16.08125
7	0	2	2576.9750752	2.40350303	2.006922
8	0	3	2576.8528074	0.12226780	1.249428
9	0	3	2576.8329446	0.01986275	0.300512
10	0	3	2576.8304113	0.00253335	0.247936
11	0	2	2576.8268966	0.00351463	0.12165
12	0	3	2576.8265924	0.00030421	0.044166
13	0	3	2576.8265822	0.00001022	0.026432

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

Fit Statistics	
-2 Log Likelihood	2576.83

Fit Statistics	
AIC (smaller is better)	2596.83
AICC (smaller is better)	2596.98
BIC (smaller is better)	2631.80
CAIC (smaller is better)	2641.80
HQIC (smaller is better)	2610.91

Fit Statistics for Conditional Distribution	
-2 log L(Value r. effects)	1936.31

Covariance Parameter Estimates			
Cov Parm	Subject	Estimate	Standard Error
Intercept	newID	3.6508	3.1115
rater	newID	0.5504	3.0729

Solutions for Fixed Effects							
Effect	Value	Attribute	Estimate	Standard Error	DF	t Value	Pr > t
Intercept	0		-1.7241	0.2047	0	-8.42	.
Intercept	1		2.4821	0.2127	0	11.67	.
Intercept	2		5.3666	0.2960	0	18.13	.
Attribute		LLL	-0.3708	0.1995	1213	-1.86	0.0633
Attribute		LLS	0.2093	0.1996	1213	1.05	0.2946
Attribute		LUS	1.2743	0.2070	1213	6.16	<.0001
Attribute		RLL	-0.5955	0.1980	1213	-3.01	0.0027
Attribute		RML	-0.2292	0.2000	1213	-1.15	0.2520
Attribute		RUL	0

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Attribute	5	1213	18.93	<.0001

Estimates											
Label	Estimate	Standard Error	DF	t Value	Pr > t	Alpha	Lower	Upper	Exponentiated Estimate	Exponentiated Lower	Exponentiated Upper
RUL vs. RML	-0.5801	0.2009	1213	-2.89	0.0040	0.05	-0.9744	-0.1859	0.5598	0.3774	0.8304
RUL vs. RLL	-1.6451	0.2106	1213	-7.81	<.0001	0.05	-2.0582	-1.2320	0.1930	0.1277	0.2917
RUL vs. LUS	0.2247	0.1972	1213	1.14	0.2547	0.05	-0.1621	0.6115	1.2519	0.8503	1.8432
RUL vs. LLS	-0.1416	0.2002	1213	-0.71	0.4793	0.05	-0.5343	0.2510	0.8679	0.5861	1.2854
RUL vs. LLL	-0.3708	0.1995	1213	-1.86	0.0633	0.05	-0.7622	0.02050	0.6902	0.4667	1.0207
RML vs. RLL	-1.0650	0.2066	1213	-5.15	<.0001	0.05	-1.4703	-0.6597	0.3447	0.2298	0.5170
RML vs. LUS	0.8048	0.1997	1213	4.03	<.0001	0.05	0.4130	1.1966	2.2363	1.5113	3.3089
RML vs. LLS	0.4385	0.2012	1213	2.18	0.0295	0.05	0.04367	0.8333	1.5504	1.0446	2.3009
RML vs. LLL	0.2093	0.1996	1213	1.05	0.2946	0.05	-0.1824	0.6010	1.2328	0.8333	1.8239
RLL vs. LUS	1.8698	0.2105	1213	8.88	<.0001	0.05	1.4568	2.2828	6.4871	4.2921	9.8046
RLL vs. LLS	1.5035	0.2100	1213	7.16	<.0001	0.05	1.0914	1.9155	4.4974	2.9786	6.7907
RLL vs. LLL	1.2743	0.2070	1213	6.16	<.0001	0.05	0.8682	1.6804	3.5763	2.3827	5.3677
LUS vs. LLS	-0.3663	0.1984	1213	-1.85	0.0651	0.05	-0.7555	0.02292	0.6933	0.4698	1.0232
LUS vs. LLL	-0.5955	0.1980	1213	-3.01	0.0027	0.05	-0.9839	-0.2071	0.5513	0.3739	0.8129
LLS vs. LLL	-0.2292	0.2000	1213	-1.15	0.2520	0.05	-0.6215	0.1632	0.7952	0.5371	1.1773

Significant Pairwise Comparisons for tib

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. RML	0.0040	0.55982
RUL vs. RLL	<.0001	0.19299
RML vs. RLL	<.0001	0.34473
RML vs. LUS	<.0001	2.23625
RML vs. LLS	0.0295	1.55036
RLL vs. LUS	<.0001	6.48705
RLL vs. LLS	<.0001	4.49738
RLL vs. LLL	<.0001	3.57625
LUS vs. LLL	0.0027	0.55129