

The GLIMMIX Procedure

Model Information	
Data Set	WORK.ATEL
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	1140
2	1	236
3	2	36
4	3	52
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	1734.4263044	.	165.4547
1	0	159	1734.173513	0.25279135	31.48256
2	0	4	1718.1920986	15.98141445	50.76615
3	0	2	1705.9076247	12.28447393	27.20242
4	0	3	1703.3553543	2.55227040	14.50086
5	0	2	1702.6294947	0.72585952	16.37933
6	0	4	1700.8061264	1.82336833	10.04842
7	0	3	1700.3986605	0.40746587	4.398075
8	0	2	1700.1490872	0.24957330	5.259556
9	0	2	1699.7590385	0.39004875	1.039737
10	0	3	1699.7064046	0.05263387	0.490113
11	0	3	1699.6987155	0.00768908	0.42138
12	0	3	1699.6977244	0.00099115	0.225626
13	0	2	1699.6976491	0.00007533	0.270437
14	0	4	1699.6971762	0.00047283	0.217429
15	0	6	1699.669657	0.02751919	0.102281
16	0	3	1699.6685899	0.00106718	0.332742
17	0	4	1699.664562	0.00402791	0.204922
18	0	3	1699.6641655	0.00039645	0.052385

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
19	0	3	1699.6641536	0.00001188	0.001812
20	0	3	1699.6641534	0.00000018	0.000042

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

Fit Statistics	
-2 Log Likelihood	1699.66
AIC (smaller is better)	1719.66
AICC (smaller is better)	1719.82
BIC (smaller is better)	1754.64
CAIC (smaller is better)	1764.64
HQIC (smaller is better)	1733.75

Fit Statistics for Conditional Distribution	
-2 log L(Value r. effects)	1367.82

Covariance Parameter Estimates			
Cov Parm	Subject	Estimate	Standard Error
Intercept	newID	1.2310	3.1118
rater	newID	0.5291	3.0985

Solutions for Fixed Effects							
Effect	Value	Attribute	Estimate	Standard Error	DF	t Value	Pr > t
Intercept	0		2.1370	0.2227	0	9.60	.
Intercept	1		4.2416	0.2747	0	15.44	.
Intercept	2		4.9399	0.2993	0	16.51	.
Attribute		LLL	0.8485	0.3056	1213	2.78	0.0056
Attribute		LLS	-1.7627	0.2391	1213	-7.37	<.0001
Attribute		LUS	0.9793	0.3190	1213	3.07	0.0022
Attribute		RLL	1.0936	0.3233	1213	3.38	0.0007
Attribute		RML	-2.2084	0.2466	1213	-8.96	<.0001
Attribute		RUL	0

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Attribute	5	1213	46.97	<.0001

Estimates											
Label	Estimate	Standard Error	DF	t Value	Pr > t	Alpha	Lower	Upper	Exponentiated Estimate	Exponentiated Lower	Exponentiated Upper
RUL vs. RML	2.6112	0.2886	1213	9.05	<.0001	0.05	2.0450	3.1774	13.6152	7.7292	23.9835
RUL vs. RLL	-0.1309	0.3525	1213	-0.37	0.7105	0.05	-0.8225	0.5608	0.8773	0.4393	1.7520
RUL vs. LUS	-0.2451	0.3554	1213	-0.69	0.4906	0.05	-0.9425	0.4523	0.7826	0.3897	1.5718
RUL vs. LLS	3.0568	0.2965	1213	10.31	<.0001	0.05	2.4750	3.6386	21.2603	11.8821	38.0402
RUL vs. LLL	0.8485	0.3056	1213	2.78	0.0056	0.05	0.2489	1.4480	2.3361	1.2827	4.2547
RML vs. RLL	-2.7420	0.3014	1213	-9.10	<.0001	0.05	-3.3334	-2.1507	0.06444	0.03567	0.1164
RML vs. LUS	-2.8563	0.3084	1213	-9.26	<.0001	0.05	-3.4613	-2.2513	0.05748	0.03139	0.1053
RML vs. LLS	0.4457	0.1922	1213	2.32	0.0205	0.05	0.06866	0.8226	1.5615	1.0711	2.2765
RML vs. LLL	-1.7627	0.2391	1213	-7.37	<.0001	0.05	-2.2318	-1.2936	0.1716	0.1073	0.2743
RLL vs. LUS	-0.1143	0.3678	1213	-0.31	0.7561	0.05	-0.8359	0.6074	0.8920	0.4335	1.8356
RLL vs. LLS	3.1877	0.3087	1213	10.33	<.0001	0.05	2.5821	3.7933	24.2326	13.2245	44.4038
RLL vs. LLL	0.9793	0.3190	1213	3.07	0.0022	0.05	0.3535	1.6052	2.6627	1.4240	4.9789
LUS vs. LLS	3.3020	0.3162	1213	10.44	<.0001	0.05	2.6816	3.9223	27.1656	14.6084	50.5166
LUS vs. LLL	1.0936	0.3233	1213	3.38	0.0007	0.05	0.4593	1.7278	2.9850	1.5830	5.6285
LLS vs. LLL	-2.2084	0.2466	1213	-8.96	<.0001	0.05	-2.6922	-1.7245	0.1099	0.06773	0.1783

Significant Pairwise Comparisons for atel

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. RML	<.0001	13.6152
RUL vs. LLS	<.0001	21.2603
RUL vs. LLL	0.0056	2.3361
RML vs. RLL	<.0001	0.0644

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RML vs. LUS	<.0001	0.0575
RML vs. LLS	0.0205	1.5615
RML vs. LLL	<.0001	0.1716
RLL vs. LLS	<.0001	24.2326
RLL vs. LLL	0.0022	2.6627
LUS vs. LLS	<.0001	27.1656
LUS vs. LLL	0.0007	2.9850
LLS vs. LLL	<.0001	0.1099