## The GLIMMIX Procedure

Model Information				
Data Set	WORK.CONS			
Response Variable	Value			
Response Distribution Multinomial (order				
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	964		
2	1	457		
3	2	39		
4	3	4		
The GLIMMIX procedure is modeling the pr	obabilities of levels of Value havin	g 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-Newtor				
Parameters in Optimization	10 2 0			
Lower Boundaries				
Upper Boundaries				
Fixed Effects	Not Profiled			
Starting From	GLM estimates			
Quadrature Points	5			

	Iteration History							
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient			
0	0	4	1984.7593579		248.777			
1	0	126	1979.6510647	5.10829315	50.25108			
2	0	4	1962.2889245	17.36214019	31.15852			
3	0	3	1957.550694	4.73823056	10.9227			
4	0	4	1954.5221825	3.02851148	6.838279			
5	0	2	1953.5349377	0.98724479	1.991247			
6	0	3	1953.1141126	0.42082506	2.731473			
7	0	3	1952.8827352	0.23137742	1.557177			
8	0	3	1952.8188924	0.06384284	0.595183			
9	0	3	1952.8095707	0.00932171	0.287395			
10	0	3	1952.807667	0.00190370	0.102183			
11	0	3	1952.8071898	0.00047722	0.068529			
12	0	3	1952.8071335	0.00005622	0.056662			
13	0	3	1952.8071202	0.00001331	0.055458			

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

Fit Statistics		
-2 Log Likelihood	1952.81	

Fit Statistics				
AIC (smaller is better)	1972.81			
AICC (smaller is better)	1972.96			
BIC (smaller is better)	2007.78			
CAIC (smaller is better)	2017.78			
HQIC (smaller is better)	1986.89			

Fit Statistics for Conditional Distribution		istribution
	-2 log L(Value   r. effects)	1511.45

Covai	Covariance Parameter Estimates				
Cov Parm	Subject	Estimate	Standard Error		
Intercept	newID	1.8716	1.8900		
rater	newID	0.5021	1.8648		

	Solutions for Fixed Effects							
Effect	Value	Attribute	Estimate	Standard Error	DF	t Value	Pr >  t	
Intercept	0		0.5139	0.1816	0	2.83		
Intercept	1		4.2199	0.2588	0	16.31		
Intercept	2		6.7713	0.5484	0	12.35		
Attribute		LLL	0.8052	0.2206	1213	3.65	0.0003	
Attribute		LLS	0.05358	0.2092	1213	0.26	0.7979	
Attribute		LUS	1.4916	0.2418	1213	6.17	<.0001	
Attribute		RLL	0.5226	0.2159	1213	2.42	0.0156	
Attribute		RML	-0.1872	0.2088	1213	-0.90	0.3700	
Attribute		RUL	0					

	Type III Tests of Fixed Effects			
Effect	Num DF	Den DF	F Value	Pr > F
Attribute	5	1213	13.06	<.0001

	Estimates							
Label	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
RUL vs. RML	-0.1872	0.2088	1213	-0.90	0.3700	0.05	-0.5969	0.2224
RUL vs. RLL	0.5226	0.2159	1213	2.42	0.0156	0.05	0.09907	0.9461
RUL vs. LUS	1.4916	0.2418	1213	6.17	<.0001	0.05	1.0172	1.9659
RUL vs. LLS	0.05358	0.2092	1213	0.26	0.7979	0.05	-0.3568	0.4640
RUL vs. LLL	0.8052	0.2206	1213	3.65	0.0003	0.05	0.3725	1.2380
RML vs. RLL	0.7098	0.2160	1213	3.29	0.0010	0.05	0.2861	1.1335
RML vs. LUS	1.6788	0.2428	1213	6.91	<.0001	0.05	1.2024	2.1552
RML vs. LLS	0.2408	0.2087	1213	1.15	0.2488	0.05	-0.1687	0.6503
RML vs. LLL	0.9925	0.2211	1213	4.49	<.0001	0.05	0.5588	1.4262
RML vs. RUL	0.1872	0.2088	1213	0.90	0.3700	0.05	-0.2224	0.5969
RLL vs. LUS	0.9690	0.2447	1213	3.96	<.0001	0.05	0.4888	1.4491
RLL vs. LLS	-0.4690	0.2158	1213	-2.17	0.0299	0.05	-0.8923	-0.04569
RLL vs. LLL	0.2827	0.2250	1213	1.26	0.2093	0.05	-0.1588	0.7241
LUS vs. LLS	-1.4380	0.2418	1213	-5.95	<.0001	0.05	-1.9123	-0.9636
LUS vs. LLL	-0.6863	0.2471	1213	-2.78	0.0056	0.05	-1.1712	-0.2015
LLS vs. LLL	0.7517	0.2205	1213	3.41	0.0007	0.05	0.3190	1.1843

## Significant Pairwise Comparisons for cons

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. RLL	0.0156	1.68639
RUL vs. LUS	<.0001	4.44406
RUL vs. LLL	0.0003	2.23724
RML vs. RLL	0.0010	2.03366
RML vs. LUS	<.0001	5.35920
RML vs. LLL	<.0001	2.69794
RLL vs. LUS	<.0001	2.63525
RLL vs. LLS	0.0299	0.62562
LUS vs. LLS	<.0001	0.23741
LUS vs. LLL	0.0056	0.50342

3/4/25, 12:20 AM Results: Modeling.sas

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
LLS vs. LLL	0.0007	2.12052