Analysis for total potential realization of DO using poisson model

The GLIMMIX Procedure

Model Information	
Data Set	WORK.CLITIC_NO_DUPLICATE_TOTAL
Response Variable	Total
Response Distribution	Poisson
Link Function	Log
Variance Function	Default
Variance Matrix	Diagonal
Estimation Technique	Maximum Likelihood
Degrees of Freedom Method	Residual

Class Level Information		
Class	**Levels**	**Values**
group	3	Child L2 L2 SIM

Number of Observations Read	42
Number of Observations Used	42

Dimensions	
Columns in X	5
Columns in Z	0
Subjects (Blocks in V)	1
Max Obs per Subject	42

Optimization Information	
Optimization Technique	Newton-Raphson
Parameters in Optimization	4
Lower Boundaries	0
Upper Boundaries	0
Fixed Effects	Not Profiled

Analysis for total potential realization of DO using poisson model

The GLIMMIX Procedure

Iteration History					
Iteration	**Restarts**	**Evaluations**	**Objective Function**	**Change**	**Max Gradient**
0	**0**	4	85.884920475	.	18.15112
1	**0**	3	84.760370685	1.12454979	1.033266
2	**0**	3	84.755263815	0.00510687	0.005071
3	**0**	3	84.755263666	0.00000015	1.493E-7

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

Fit Statistics	
-2 Log Likelihood	169.51
AIC (smaller is better)	177.51
AICC (smaller is better)	178.59
BIC (smaller is better)	184.46
CAIC (smaller is better)	188.46
HQIC (smaller is better)	180.06
Pearson Chi-Square	38.93
Pearson Chi-Square / DF	1.02

Type III Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
group	2	38	13.00	<.0001
dele	1	38	5.36	0.0261

group Least Squares Means							
group	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**	**Mean**	**Standard Error Mean**
Child L2	1.3118	0.1691	38	7.76	<.0001	3.7130	0.6279
L2	0.8931	0.1476	38	6.05	<.0001	2.4426	0.3606
SIM	2.0541	0.1435	38	14.32	<.0001	7.8001	1.1191

Analysis for total potential realization of DO using poisson model

The GLIMMIX Procedure

Differences of group Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer							
group	_group	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P
Child L2	L2	0.4188	0.2261	38	1.85	0.0718	0.1666
Child L2	SIM	-0.7423	0.2200	38	-3.37	0.0017	0.0048
L2	SIM	-1.1611	0.2322	38	-5.00	<.0001	<.0001

Analysis for total potential realization of DO using poisson model
Analysis of clitic and NP production using repeated measure logistic regression

The GLIMMIX Procedure

Model Information	
Data Set	WORK.CLITIC_NO_NULL
Response Variable (Events)	number
Response Variable (Trials)	Total
Response Distribution	Binomial
Link Function	Logit
Variance Function	Default
Variance Matrix Blocked By	participant
Estimation Technique	Residual PL
Degrees of Freedom Method	Between-Within

Class Level Information		
Class	**Levels**	**Values**
type	2	NP clitic
group	3	Adult L2 Child L2 SIM
participant	27	C1 C2 C3 C4 C5 C6 C7 C8 C9 L1 L2 L3 L4 L5 L6 L7 L8 L9 S1 S2 S3 S4 S5 S6 S7 S8 S9

Number of Observations Read	84
Number of Observations Used	77
Number of Events	159
Number of Trials	325

Dimensions	
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	0
Subjects (Blocks in V)	27
Max Obs per Subject	18

Analysis for total potential realization of DO using poisson model
Analysis of clitic and NP production using repeated measure logistic regression

The GLIMMIX Procedure

Optimization Information	
Optimization Technique	None
Parameters	0
Lower Boundaries	0
Upper Boundaries	0
Fixed Effects	Profiled
Residual Variance	Profiled
Starting From	Data

Iteration History					
Iteration	**Restarts**	**Subiterations**	**Objective Function**	**Change**	**Max Gradient**
0	**0**	**0**	266.13091186	0.35130940	.
1	**0**	**0**	282.02018839	0.04305646	.
2	**0**	**0**	285.14984234	0.00384910	.
3	**0**	**0**	285.30962474	0.00001843	.
4	**0**	**0**	285.31005896	0.00000000	.

Convergence criterion (PCONV=1.11022E-8) satisfied.

Fit Statistics	
-2 Res Log Pseudo-Likelihood	285.31
Generalized Chi-Square	75.45
Gener. Chi-Square / DF	1.08

Covariance Parameter Estimates		
Cov Parm	**Estimate**	**Standard Error**
Residual (VC)	1.0779	0.1822

Analysis for total potential realization of DO using poisson model
Analysis of clitic and NP production using repeated measure logistic regression

The GLIMMIX Procedure

Solutions for Fixed Effects							
Effect	**type**	**group**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Intercept			4.4246	1.6417	23	2.70	0.0129
group		Adult L2	-3.1475	0.8344	23	-3.77	0.0010
group		Child L2	-2.7126	0.8515	23	-3.19	0.0041
group		SIM	0	.	.	.	.
type	NP		-6.9746	1.0540	22	-6.62	<.0001
type	clitic		0	.	.	.	.
type*group	NP	Adult L2	5.5879	1.1287	22	4.95	<.0001
type*group	NP	Child L2	4.6594	1.2072	22	3.86	0.0008
type*group	NP	SIM	0	.	.	.	.
type*group	clitic	Adult L2	0	.	.	.	.
type*group	clitic	Child L2	0	.	.	.	.
type*group	clitic	SIM	0	.	.	.	.
dele			-0.01890	0.03127	47	-0.60	0.5485

Type III Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
group	2	23	0.20	0.8237
type	1	22	70.37	<.0001
type*group	2	22	12.30	0.0003
dele	1	47	0.37	0.5485

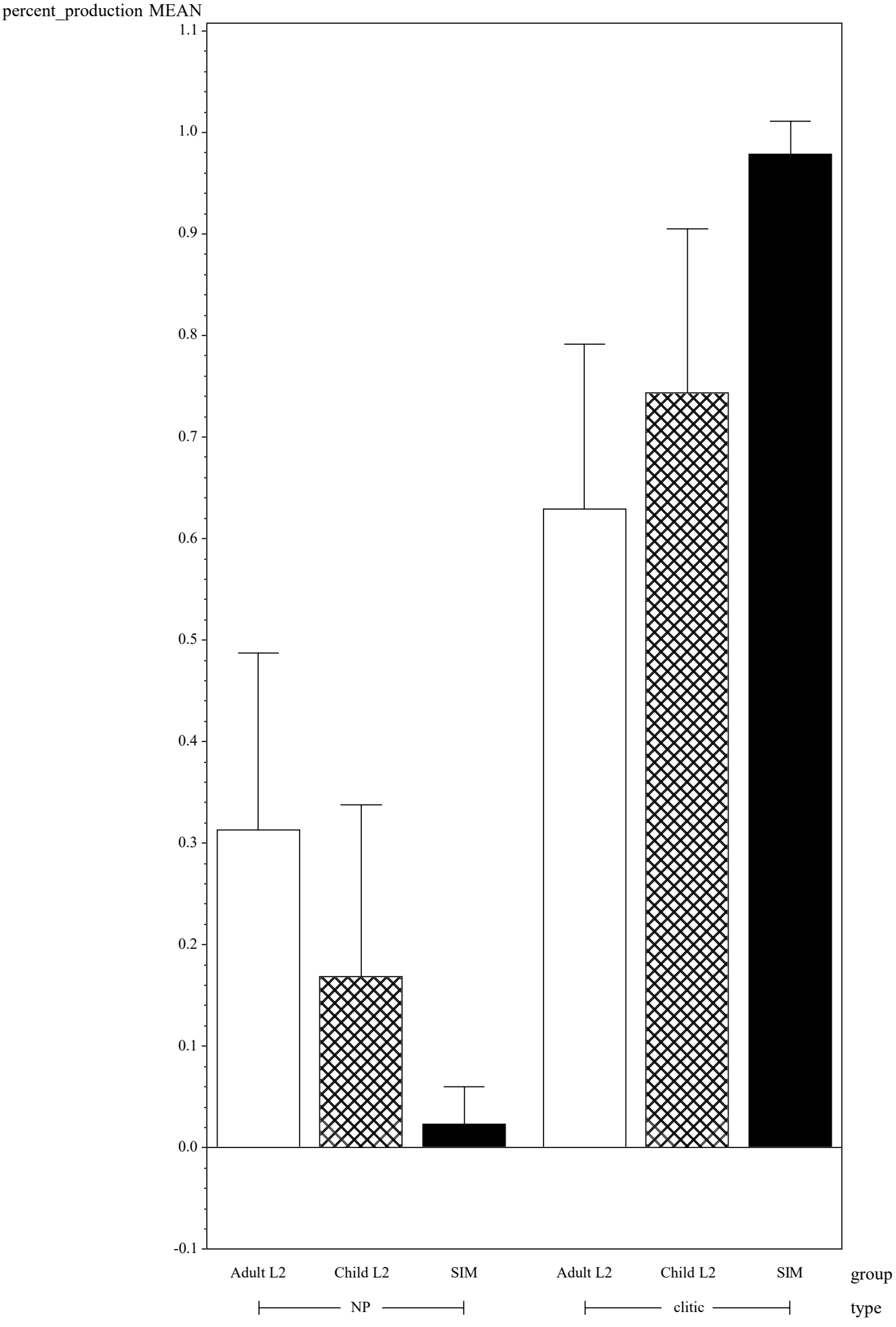
type*group Least Squares Means								
type	**group**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**	**Mean**	**Standard Error Mean**
NP	Adult L2	-0.9131	0.3125	22	-2.92	0.0079	0.2864	0.06385
NP	Child L2	-1.4066	0.4420	22	-3.18	0.0043	0.1968	0.06986
NP	SIM	-3.3535	0.7575	22	-4.43	0.0002	0.03378	0.02473
clitic	Adult L2	0.4736	0.3030	22	1.56	0.1323	0.6162	0.07165

Analysis for total potential realization of DO using poisson model
Analysis of clitic and NP production using repeated measure logistic regression

The GLIMMIX Procedure

type*group Least Squares Means								
type	group	Estimate	Standard Error	DF	t Value	Pr > |t|	Mean	Standard Error Mean
clitic	Child L2	0.9086	0.3894	22	2.33	0.0292	0.7127	0.07972
clitic	SIM	3.6211	0.7566	22	4.79	<.0001	0.9739	0.01920

Differences of type*group Least Squares Means								
type	group	_type	_group	Estimate	Standard Error	DF	t Value	Pr > |t|
NP	Adult L2	NP	Child L2	0.4935	0.5320	22	0.93	0.3636
NP	Adult L2	NP	SIM	2.4404	0.8369	22	2.92	0.0080
NP	Adult L2	clitic	Adult L2	-1.3867	0.4039	22	-3.43	0.0024
NP	Adult L2	clitic	Child L2	-1.8216	0.4984	22	-3.66	0.0014
NP	Adult L2	clitic	SIM	-4.5342	0.8363	22	-5.42	<.0001
NP	Child L2	NP	SIM	1.9469	0.8839	22	2.20	0.0384
NP	Child L2	clitic	Adult L2	-1.8802	0.5256	22	-3.58	0.0017
NP	Child L2	clitic	Child L2	-2.3152	0.5888	22	-3.93	0.0007
NP	Child L2	clitic	SIM	-5.0277	0.8832	22	-5.69	<.0001
NP	SIM	clitic	Adult L2	-3.8271	0.8351	22	-4.58	0.0001
NP	SIM	clitic	Child L2	-4.2620	0.8523	22	-5.00	<.0001
NP	SIM	clitic	SIM	-6.9746	1.0540	22	-6.62	<.0001
clitic	Adult L2	clitic	Child L2	-0.4350	0.4924	22	-0.88	0.3866
clitic	Adult L2	clitic	SIM	-3.1475	0.8344	22	-3.77	0.0010
clitic	Child L2	clitic	SIM	-2.7126	0.8515	22	-3.19	0.0043


percent_production MEAN
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
Adult L2
Child L2
SIM
Adult L2
Child L2
SIM
group
NP
clitic
type