#### GENLINMIXED

/DATA\_STRUCTURE SUBJECTS=ID REPEATED\_MEASURESrelationship COVARIANCE\_TYP&D IAGONAL

/FIELDS TARGET=CE TRIALS=NONE OFFSET=NONE

/TARGET\_OPTIONS DISTRIBUTION NORMAL LINK=IDENTITY

/FIXED EFFECTS= relationship ZAVO ZANX relationship ZAVO relationship ZANX ZAVO\*ZANX relationship ZANX\*ZAVO

USE\_INTERCEPTHTRUE

/RANDOM USE\_INTERCEPTRUE SUBJECTS=ID COVARIANCE\_TYPEVARIANCE\_COMPONENTS
/BUILD\_OPTIONS TARGET\_CATEGORY\_ORDERASCENDING INPUTS\_CATEGORY\_ORDERASCENDI
NG MAX\_ITERATION\$100

CONFIDENCE\_LEVE \$\( 95 \) DF\_METHOD=RESIDUAL COVB=MODEL PCONVERGE=0.000001(ABSOL UTE) SCORING=0

SINGULAR=0.00000000001

/EMMEANS\_OPTIONS SCALE=ORIGINAL PADJUST=LSD.

### **Generalized Linear Mixed Models**

#### **Notes**

0 1 10		
Output Created		04-APR-2017 14:24:51
Comments		
Input	Data	\\tsclient\Desktop\TestforSPSS.csv
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	38

#### **Notes**

Syntax		GENLINMIXED /DATA_STRUCTURE SUBJECTS=ID REPEATED_MEASURES=relations hip COVARIANCE_TYPE=DIAGONAL /FIELDS TARGET=CE TRIALS=NONE OFFSET=NONE /TARGET_OPTIONS DISTRIBUTION=NORMAL LINK=IDENTITY /FIXED EFFECTS= relationship ZAVO ZANX relationship*ZAVO relationship*ZANX ZAVO*ZANX relationship*ZANX*ZAVO USE_INTERCEPT=TRUE /RANDOM USE_INTERCEPT=TRUE SUBJECTS=ID COVARIANCE_TYPE=VARIANCE_ COMPONENTS /BUILD_OPTIONS TARGET_CATEGORY_ORDER=AS CENDING INPUTS_CATEGORY_ORDER=AS CENDING MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95 DF_METHOD=RESIDUAL COVB=MODEL PCONVERGE=0. 000001(ABSOLUTE) SCORING=0
		COMPONENTS /BUILD_OPTIONS TARGET_CATEGORY_ORDER=AS CENDING INPUTS_CATEGORY_ORDER=AS CENDING MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95 DF_METHOD=RESIDUAL
Resources	Processor Time Elapsed Time	00:00:04.91 00:00:03.36

### Warnings

glmm: The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The procedure continues despite this warning. Subsequent results produced are based on the last iteration. Validity of the model fit is uncertain.

### **Case Processing Summary**

	N	Percent
Included	38	100.0%
Excluded	0	0.0%
Total	38	100.0%

### **Model Summary**

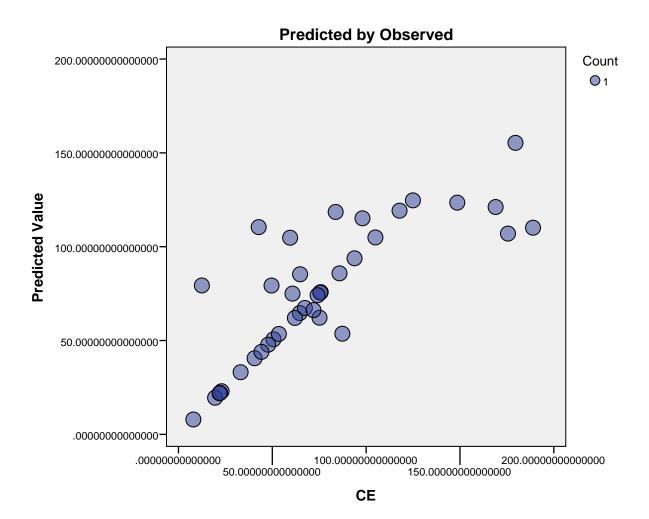
Target		CE	
Probability Distribution		Normal	
Link Function		Identity	
Information Criterion	Akaike Corrected		267.322
	Bayesian		270.319

Information criteria are based on the -2 log likelihood (260.322) and are used to compare models. Models with smaller information criterion values fit better.

# Data Structure<sup>a</sup>

	Subjects ID	Repeated Measures relationship	Target CE
Data for First Subject	1	F	50.64000000
Total Number of Levels	1 19	2	87.33000000

a. Target: CE



Fixed Effects<sup>a</sup>

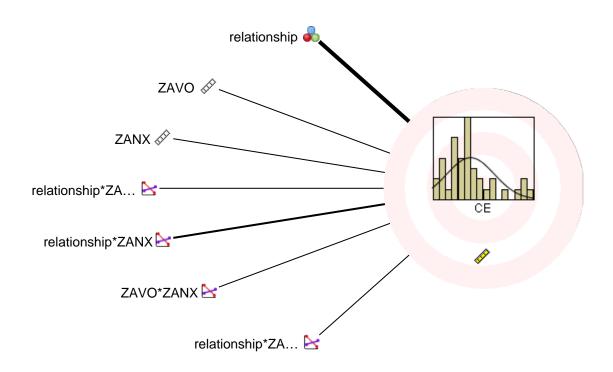
Source	F	df1	df2	Sig.
Corrected Model	4.236	7	28	.003
relationship	5.742	1	28	.023
ZAVO	.072	1	28	.791
ZANX	.000	1	28	.983
relationship * ZAVO	1.201	1	28	.282
relationship * ZANX	2.606	1	28	.118
ZAVO * ZANX	.202	1	28	.657
relationship * ZANX * ZAVO	.016	1	28	.899

Probability distribution: Normal

Link function: Identity

a. Target: CE

# **Fixed Effects**



Fixed Coefficients<sup>a</sup>

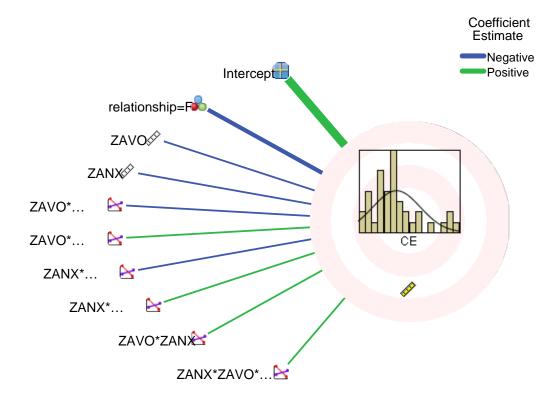
					95% Confidence Interval	
Model Term	Coefficient	Std. Error	t	Sig.	Lower	Upper
Intercept	103.695	17.4536	5.941	.000	67.943	139.447
relationship=F	-41.101	17.1518	-2.396	.023	-76.235	-5.967
relationship=P	0 <sub>p</sub>					
ZAVO	-7.114	621343.2880	.000	1.000	-1272771.142	1272756.915
ZANX	-12.619	784478.6883	.000	1.000	-1606944.366	1606919.129
ZAVO*[relationship=F]	-7.378	621343.2880	.000	1.000	-1272771.406	1272756.651
ZAVO*[relationship=P]	15.623	621343.2884	.000	1.000	-1272748.406	1272779.652
ZANX*[relationship=F]	-1.859	784478.6883	.000	1.000	-1606933.607	1606929.889
ZANX*[relationship=P]	26.725	784478.6884	.000	1.000	-1606905.023	1606958.473
ZAVO*ZANX	2.968	16.3938	.181	.858	-30.614	36.549
ZANX*ZAVO* [relationship=F]	2.171	17.0351	.127	.899	-32.724	37.066
ZANX*ZAVO* [relationship=P]	0 <sub>p</sub>					

Probability distribution: Normal Link function: Identity

a. Target: CE

b. This coefficient is set to zero because it is redundant.

### **Fixed Coefficients**



# **Random Effect Covariances**

### Random Effect Block 1

Random Effect Block	Intercept
Intercept	603.526

Covariance Structure: Variance

components

Subject Specification: ID

## **Covariance Parameters**

### **Covariance Parameters Summary**

Covariance Parameters	Residual Effect	2
	Random Effects	1
Design Matrix Columns	Fixed Effects	12
	Random Effects	1 <sup>a</sup>
Common Subjects		19

Common subjects are based on the subject specifications for the residual and random effects and are used to chunk the data for better performance.

a. This is the number of columns per common subject.

#### **Residual Effect**

					95% Confidence Interval	
Residual Effect	Estimate	Std. Error	Z	Sig.	Lower	Upper
Var(relationship=F)	.002 <sup>a</sup>					
Var(relationship=P)	2211.319	22.307	99.129	.000	2168.027	2255.476

Covariance Structure: Diagonal Subject Specification: ID

a. This parameter is redundant.

#### Random Effect

					95% Confidence Interv	
Random Effect Covariance	Estimate	Std. Error	Z	Sig.	Lower	Upper
Var(Intercept)	603.526 <sup>a</sup>					

Covariance Structure: Variance components

Subject Specification: ID

a. This parameter is redundant.

# **Estimated Marginal Means for Top Significant Fixed Effects**

