```
 DATASET ACTIVATE DataSet7.
GLM HA_faces SA_faces BY Groups
  /WSFACTOR=Emotion 2 Polynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Groups) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Emotion) COMPARE ADJ(BONFERRONI)
  /PRINT=DESCRIPTIVE HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Emotion
  /DESIGN=Groups.
```

General Linear Model

Notes

Output Created		31-DEC-2018 22:35:47
Comments		
Input	Data	D:\Documents\fix_frequency.sav
	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	32
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM HA_faces SA_faces BY Groups /WSFACTOR=Emotion 2 Polynomial /METHOD=SSTYPE(3) /EMMEANS=TABLES (Groups) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Emotion) COMPARE ADJ (BONFERRONI) /PRINT=DESCRIPTIVE HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=Emotion /DESIGN=Groups.

Notes

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

[DataSet7] D:\Documents\fix_frequency.sav

Within-Subjects Factors

Measure: MEASURE_1

Emotion	Dependent Variable
1	HA_faces
2	SA_faces

Between-Subjects Factors

		Value Label	N
Groups	.00	Neutral Primer	16
	1.00	Sad Primer	16

Descriptive Statistics

	Groups	Mean	Std. Deviation	N
HA_faces	Neutral Primer	48.8750	13.40584	16
	Sad Primer	49.7500	16.55899	16
	Total	49.3125	14.82682	32
SA_faces	Neutral Primer	41.9375	11.87978	16
	Sad Primer	45.7500	15.27307	16
	Total	43.8437	13.59817	32

Box's Test of Equality of Covariance Matrices[a]

Box's M	2.657
F	.822
df1	3
df2	162000.000
Sig.	.482

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Groups
Within Subjects Design: Emotion

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Emotion	Pillai's Trace	.204	7.675[b]	1.000	30.000
	Wilks' Lambda	.796	7.675[b]	1.000	30.000
	Hotelling's Trace	.256	7.675[b]	1.000	30.000
	Roy's Largest Root	.256	7.675[b]	1.000	30.000
Emotion * Groups	Pillai's Trace	.018	.554[b]	1.000	30.000
	Wilks' Lambda	.982	.554[b]	1.000	30.000
	Hotelling's Trace	.018	.554[b]	1.000	30.000
	Roy's Largest Root	.018	.554[b]	1.000	30.000

Multivariate Tests[a]

Effect		Sig.
Emotion	Pillai's Trace	.010
	Wilks' Lambda	.010
	Hotelling's Trace	.010
	Roy's Largest Root	.010
Emotion * Groups	Pillai's Trace	.463
	Wilks' Lambda	.463
	Hotelling's Trace	.463
	Roy's Largest Root	.463

a. Design: Intercept + Groups
Within Subjects Design: Emotion

b. Exact statistic

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

					Epsilon[b]
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Greenhouse-Geisser
Emotion	1.000	.000	0	.	1.000

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

	Epsilon[b]	
Within Subjects Effect	Huynh-Feldt	Lower-bound
Emotion	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + Groups
Within Subjects Design: Emotion

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
Emotion	Sphericity Assumed	478.516	1	478.516	7.675
	Greenhouse-Geisser	478.516	1.000	478.516	7.675
	Huynh-Feldt	478.516	1.000	478.516	7.675
	Lower-bound	478.516	1.000	478.516	7.675
Emotion * Groups	Sphericity Assumed	34.516	1	34.516	.554
	Greenhouse-Geisser	34.516	1.000	34.516	.554
	Huynh-Feldt	34.516	1.000	34.516	.554
	Lower-bound	34.516	1.000	34.516	.554
Error(Emotion)	Sphericity Assumed	1870.469	30	62.349	
	Greenhouse-Geisser	1870.469	30.000	62.349	
	Huynh-Feldt	1870.469	30.000	62.349	
	Lower-bound	1870.469	30.000	62.349	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.
Emotion	Sphericity Assumed	.010
	Greenhouse-Geisser	.010
	Huynh-Feldt	.010
	Lower-bound	.010
Emotion * Groups	Sphericity Assumed	.463
	Greenhouse-Geisser	.463
	Huynh-Feldt	.463
	Lower-bound	.463
Error(Emotion)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Emotion	Type III Sum of Squares	df	Mean Square	F	Sig.
Emotion	Linear	478.516	1	478.516	7.675	.010
Emotion * Groups	Linear	34.516	1	34.516	.554	.463
Error(Emotion)	Linear	1870.469	30	62.349		

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
HA_faces	Based on Mean	.234	1	30	.632
	Based on Median	.212	1	30	.649
	Based on Median and with adjusted df	.212	1	27.911	.649
	Based on trimmed mean	.228	1	30	.636
SA_faces	Based on Mean	1.742	1	30	.197
	Based on Median	1.736	1	30	.198
	Based on Median and with adjusted df	1.736	1	29.877	.198
	Based on trimmed mean	1.738	1	30	.197

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Groups
Within Subjects Design: Emotion

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	138849.391	1	138849.391	394.675	.000
Groups	87.891	1	87.891	.250	.621
Error	10554.219	30	351.807		

Estimated Marginal Means

1. Groups

Estimates

Measure: MEASURE_1

Groups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Neutral Primer	45.406	3.316	38.635	52.178
Sad Primer	47.750	3.316	40.978	54.522

Pairwise Comparisons

Measure: MEASURE_1

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence [a]... Lower Bound
Neutral Primer	Sad Primer	-2.344	4.689	.621	-11.920
Sad Primer	Neutral Primer	2.344	4.689	.621	-7.233

Pairwise Comparisons

Measure: MEASURE_1

(I) Groups	(J) Groups	95% Confidence Interval for [a]... Upper Bound
Neutral Primer	Sad Primer	7.233
Sad Primer	Neutral Primer	11.920

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Measure: MEASURE_1

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	43.945	1	43.945	.250	.621
Error	5277.109	30	175.904		

The F tests the effect of Groups. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

2. Emotion

Estimates

Measure: MEASURE_1

Emotion	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1	49.313	2.663	43.874	54.751
2	43.844	2.419	38.904	48.783

Pairwise Comparisons

Measure: MEASURE_1

(I) Emotion	(J) Emotion	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	5.469*	1.974	.010	1.437	9.500
2	1	-5.469*	1.974	.010	-9.500	-1.437

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.
Pillai's trace	.204	7.675[a]	1.000	30.000	.010
Wilks' lambda	.796	7.675[a]	1.000	30.000	.010
Hotelling's trace	.256	7.675[a]	1.000	30.000	.010
Roy's largest root	.256	7.675[a]	1.000	30.000	.010

Each F tests the multivariate effect of Emotion. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic