```
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  /CELLRANGE=FULL
  /READNAMES=ON
  /DATATYPEMIN PERCENTAGE=95.0
  /HIDDEN IGNORE=YES.
EXECUTE.
DATASET NAME DataSet1 WINDOW=FRONT.
GLM PreOmissionNumber PostOmissionNumber BY Treatment1
  /WSFACTOR=time 2 Simple
  /MEASURE=omission
  /CONTRAST(Treatment1)=Simple
  /METHOD=SSTYPE(3)
  /POSTHOC=Treatment1(TUKEY)
  /PLOT=PROFILE(time*Treatment1)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Treatment1) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(time) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Treatment1*time)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=time
  /DESIGN=Treatment1.
```

General Linear Model

Notes

Output Created		28-AUG-2019 13:03:...
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	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM PreOmissionNumber PostOmissionNumber BY Treatment1 /WSFACTOR=time 2 Simple /MEASURE=omission /CONTRAST (Treatment1)=Simple /METHOD=SSTYPE(3) /POSTHOC=Treatment1 (TUKEY) /PLOT=PROFILE (time*Treatment1) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Treatment1) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (time) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Treatment1*time) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=time /DESIGN=Treatment1.
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[DataSet1]

Warnings

Post hoc tests are not performed for Treatment 1 because there are fewer than three groups.

Within-Subjects Factors

Measure: omission

time	Dependent Variable
1	PreOmission Number
2	PostOmission Number

Between-Subjects Factors

		N
Treatment 1	control	10
	treatment	12

Descriptive Statistics

	Treatment 1	Mean	Std. Deviation	N
Pre- Omission Number	control	3.60	4.904	10
	treatment	1.58	1.379	12
	Total	2.50	3.515	22
Post- Omission Number	control	5.90	8.130	10
	treatment	.42	.515	12
	Total	2.91	6.023	22

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

Box's M	50.274
F	14.918
df1	3
df2	262277.431
Sig.	.000

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

a. Design: Intercept + Treatment1
Within Subjects Design: time

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
time	Pillai's Trace	.032	.668[b]	1.000	20.000	.423
	Wilks' Lambda	.968	.668[b]	1.000	20.000	.423
	Hotelling's Trace	.033	.668[b]	1.000	20.000	.423
	Roy's Largest Root	.033	.668[b]	1.000	20.000	.423
time * Treatment1	Pillai's Trace	.238	6.250[b]	1.000	20.000	.021
	Wilks' Lambda	.762	6.250[b]	1.000	20.000	.021
	Hotelling's Trace	.312	6.250[b]	1.000	20.000	.021
	Roy's Largest Root	.312	6.250[b]	1.000	20.000	.021

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
time	Pillai's Trace	.032	.668	.122
	Wilks' Lambda	.032	.668	.122
	Hotelling's Trace	.032	.668	.122
	Roy's Largest Root	.032	.668	.122
time * Treatment1	Pillai's Trace	.238	6.250	.662
	Wilks' Lambda	.238	6.250	.662
	Hotelling's Trace	.238	6.250	.662
	Roy's Largest Root	.238	6.250	.662

a. Design: Intercept + Treatment1
Within Subjects Design: time

b. Exact statistic

c. Computed using alpha = .05

Mauchly's Test of Sphericity[a]

Measure: omission

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

Mauchly's Test of Sphericity[a]

Measure: omission

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
time	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 + Treatment1
Within Subjects Design: time

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: omission

Source		Type III Sum of Squares	df	Mean Square	F
time	Sphericity Assumed	3.503	1	3.503	.668
	Greenhouse-Geisser	3.503	1.000	3.503	.668
	Huynh-Feldt	3.503	1.000	3.503	.668
	Lower-bound	3.503	1.000	3.503	.668
time * Treatment1	Sphericity Assumed	32.776	1	32.776	6.250
	Greenhouse-Geisser	32.776	1.000	32.776	6.250
	Huynh-Feldt	32.776	1.000	32.776	6.250
	Lower-bound	32.776	1.000	32.776	6.250
Error(time)	Sphericity Assumed	104.883	20	5.244	
	Greenhouse-Geisser	104.883	20.000	5.244	
	Huynh-Feldt	104.883	20.000	5.244	
	Lower-bound	104.883	20.000	5.244	

Tests of Within-Subjects Effects

Measure: omission

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Sphericity Assumed	.423	.032	.668	.122
	Greenhouse-Geisser	.423	.032	.668	.122
	Huynh-Feldt	.423	.032	.668	.122
	Lower-bound	.423	.032	.668	.122
time * Treatment1	Sphericity Assumed	.021	.238	6.250	.662
	Greenhouse-Geisser	.021	.238	6.250	.662
	Huynh-Feldt	.021	.238	6.250	.662
	Lower-bound	.021	.238	6.250	.662
Error(time)	Sphericity Assumed				
	Greenhouse-Geisser				
	Huynh-Feldt				
	Lower-bound				

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: omission

Source	time	Type III Sum of Squares	df	Mean Square	F
time	Level 1 vs. Level 2	7.006	1	7.006	.668
time * Treatment1	Level 1 vs. Level 2	65.552	1	65.552	6.250
Error(time)	Level 1 vs. Level 2	209.767	20	10.488	

Tests of Within-Subjects Contrasts

Measure: omission

Source	time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Level 1 vs. Level 2	.423	.032	.668	.122
time * Treatment1	Level 1 vs. Level 2	.021	.238	6.250	.662
Error(time)	Level 1 vs. Level 2				

a. Computed using alpha = .05

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

	F	df1	df2	Sig.
Pre- Omission Number	7.198	1	20	.014
Post- Omission Number	6.635	1	20	.018

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

a. Design: Intercept + Treatment1
Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: omission

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	180.341	1	180.341	9.878	.005	.331
Treatment1	76.705	1	76.705	4.202	.054	.174
Error	365.125	20	18.256			

Tests of Between-Subjects Effects

Measure: omission

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	9.878	.848
Treatment1	4.202	.496
Error		

a. Computed using alpha = .05

Custom Hypothesis Tests

Contrast Results (K Matrix)

Treatment 1 Simple Contrast[a]			Averaged Variable omission
Level 1 vs. Level 2	Contrast Estimate		3.750
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		3.750
	Std. Error		1.829
	Sig.		.054
	95% Confidence Interval for Difference	Lower Bound	-.066
		Upper Bound	7.566

a. Reference category = 2

Test Results

Measure: omission

Transformed Variable: AVERAGE

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	76.705	1	76.705	4.202	.054	.174
Error	365.125	20	18.256			

Test Results

Measure: omission

Transformed Variable: AVERAGE

Source	Noncent. Parameter	Observed Power[a]
Contrast	4.202	.496
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: omission

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
2.875	.915	.967	4.783

2. Treatment 1

Estimates

Measure: omission

Treatment 1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
control	4.750	1.351	1.932	7.568
treatment	1.000	1.233	-1.573	3.573

Pairwise Comparisons

Measure: omission

(I) Treatment 1	(J) Treatment 1	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence ...[a]
					Lower Bound
control	treatment	3.750	1.829	.054	-.066
treatment	control	-3.750	1.829	.054	-7.566

Pairwise Comparisons

Measure: omission

(I) Treatment 1	(J) Treatment 1	95% Confidence Interval for ...[a]
		Upper Bound
control	treatment	7.566
treatment	control	.066

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Measure: omission

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	76.705	1	76.705	4.202	.054	.174
Error	365.125	20	18.256			

Univariate Tests

Measure: omission

	Noncent. Parameter	Observed Power[a]
Contrast	4.202	.496
Error		

The F tests the effect of Treatment 1. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

3. time

Estimates

Measure: omission

			95% Confidence Interval	
time	Mean	Std. Error	Lower Bound	Upper Bound
1	2.592	.737	1.053	4.130
2	3.158	1.170	.717	5.600

Pairwise Comparisons

Measure: omission

					95% Confidence Interval for Difference[a]	
(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	Lower Bound	Upper Bound
1	2	-.567	.693	.423	-2.013	.880
2	1	.567	.693	.423	-.880	2.013

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.032	.668[a]	1.000	20.000	.423	.032
Wilks' lambda	.968	.668[a]	1.000	20.000	.423	.032
Hotelling's trace	.033	.668[a]	1.000	20.000	.423	.032
Roy's largest root	.033	.668[a]	1.000	20.000	.423	.032

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	.668	.122
Wilks' lambda	.668	.122
Hotelling's trace	.668	.122
Roy's largest root	.668	.122

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

a. Exact statistic

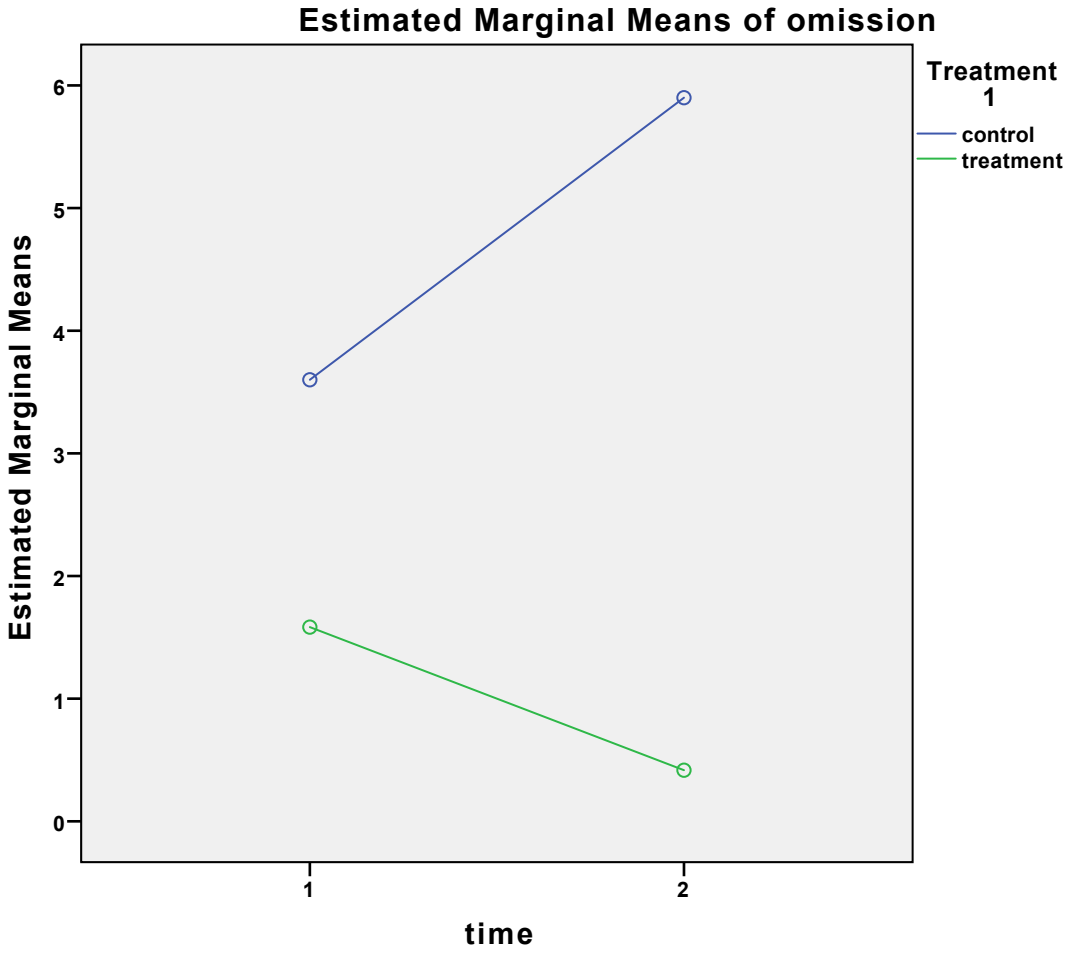
b. Computed using alpha = .05

4. Treatment 1 * time

Measure: omission

				95% Confidence Interval	
Treatment 1	time	Mean	Std. Error	Lower Bound	Upper Bound
control	1	3.600	1.089	1.328	5.872
	2	5.900	1.729	2.294	9.506
treatment	1	1.583	.994	-.491	3.658
	2	.417	1.578	-2.876	3.709

Profile Plots




```
GLM PreCommissionNumberPostCommissionNumberBY Treatment1
 /WSFACTOR=time 2 Simple
 /CONTRAST(Treatment1)=Simple
 /METHOD=SSTYPE(3)
 /POSTHOC=Treatment1(TUKEY)
 /PLOT=PROFILE(time*Treatment1)
 /EMMEANS=TABLES(OVERALL)
 /EMMEANS=TABLES(Treatment1) COMPARE ADJ(BONFERRONI)
 /EMMEANS=TABLES(time) COMPARE ADJ(BONFERRONI)
 /EMMEANS=TABLES(Treatment1*time)
 /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
 /CRITERIA=ALPHA(.05)
 /WSDESIGN=time
 /DESIGN=Treatment1.
```

General Linear Model

Notes

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	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM PreCommissionNumber PostCommissionNumber BY Treatment1 /WSFACTOR=time 2 Simple /CONTRAST (Treatment1)=Simple /METHOD=SSTYPE(3) /POSTHOC=Treatment1 (TUKEY) /PLOT=PROFILE (time*Treatment1) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Treatment1) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (time) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Treatment1*time) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=time /DESIGN=Treatment1.
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	Elapsed Time	00:00:00.00

Warnings

Post hoc tests are not performed for Treatment 1 because there are fewer than three groups.

Within-Subjects Factors

Measure: MEASURE_1

time	Dependent Variable
1	PreCommissionNumber
2	PostCommissionNumber

Between-Subjects Factors

		N
Treatment 1	control	10
	treatment	12

Descriptive Statistics

	Treatment 1	Mean	Std. Deviation	N
Pre- Commission Number	control	12.50	6.060	10
	treatment	13.67	5.821	12
	Total	13.14	5.817	22
Post- Commission Number	control	13.80	6.374	10
	treatment	6.25	5.396	12
	Total	9.68	6.890	22

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

Box's M	.598
F	.178
df1	3
df2	262277.431
Sig.	.912

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

a. Design: Intercept + Treatment1
Within Subjects Design: time

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
time	Pillai's Trace	.309	8.931[b]	1.000	20.000	.007
	Wilks' Lambda	.691	8.931[b]	1.000	20.000	.007
	Hotelling's Trace	.447	8.931[b]	1.000	20.000	.007
	Roy's Largest Root	.447	8.931[b]	1.000	20.000	.007
time * Treatment1	Pillai's Trace	.476	18.137[b]	1.000	20.000	.000
	Wilks' Lambda	.524	18.137[b]	1.000	20.000	.000
	Hotelling's Trace	.907	18.137[b]	1.000	20.000	.000
	Roy's Largest Root	.907	18.137[b]	1.000	20.000	.000

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
time	Pillai's Trace	.309	8.931	.811
	Wilks' Lambda	.309	8.931	.811
	Hotelling's Trace	.309	8.931	.811
	Roy's Largest Root	.309	8.931	.811
time * Treatment1	Pillai's Trace	.476	18.137	.982
	Wilks' Lambda	.476	18.137	.982
	Hotelling's Trace	.476	18.137	.982
	Roy's Largest Root	.476	18.137	.982

a. Design: Intercept + Treatment1
Within Subjects Design: time

b. Exact statistic

c. Computed using alpha = .05

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

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

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
time	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 + Treatment1
Within Subjects Design: time

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
time	Sphericity Assumed	102.037	1	102.037	8.931
	Greenhouse-Geisser	102.037	1.000	102.037	8.931
	Huynh-Feldt	102.037	1.000	102.037	8.931
	Lower-bound	102.037	1.000	102.037	8.931
time * Treatment1	Sphericity Assumed	207.219	1	207.219	18.137
	Greenhouse-Geisser	207.219	1.000	207.219	18.137
	Huynh-Feldt	207.219	1.000	207.219	18.137
	Lower-bound	207.219	1.000	207.219	18.137
Error(time)	Sphericity Assumed	228.508	20	11.425	
	Greenhouse-Geisser	228.508	20.000	11.425	
	Huynh-Feldt	228.508	20.000	11.425	
	Lower-bound	228.508	20.000	11.425	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Sphericity Assumed	.007	.309	8.931	.811
	Greenhouse-Geisser	.007	.309	8.931	.811
	Huynh-Feldt	.007	.309	8.931	.811
	Lower-bound	.007	.309	8.931	.811
time * Treatment1	Sphericity Assumed	.000	.476	18.137	.982
	Greenhouse-Geisser	.000	.476	18.137	.982
	Huynh-Feldt	.000	.476	18.137	.982
	Lower-bound	.000	.476	18.137	.982
Error(time)	Sphericity Assumed				
	Greenhouse-Geisser				
	Huynh-Feldt				
	Lower-bound				

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	time	Type III Sum of Squares	df	Mean Square	F
time	Level 1 vs. Level 2	204.074	1	204.074	8.931
time * Treatment1	Level 1 vs. Level 2	414.438	1	414.438	18.137
Error(time)	Level 1 vs. Level 2	457.017	20	22.851	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Level 1 vs. Level 2	.007	.309	8.931	.811
time * Treatment1	Level 1 vs. Level 2	.000	.476	18.137	.982
Error(time)	Level 1 vs. Level 2				

a. Computed using alpha = .05

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

	F	df1	df2	Sig.
Pre- Commission Number	.247	1	20	.625
Post- Commission Number	.690	1	20	.416

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

a. Design: Intercept + Treatment1
Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	2912.700	1	2912.700	100.394	.000	.834
Treatment1	55.564	1	55.564	1.915	.182	.087
Error	580.254	20	29.013			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	100.394	1.000
Treatment1	1.915	.261
Error		

a. Computed using alpha = .05

Custom Hypothesis Tests

Contrast Results (K Matrix)

Treatment 1 Simple Contrast[a]			Averaged Variable MEASURE_1
Level 1 vs. Level 2	Contrast Estimate		3.192
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		3.192
	Std. Error		2.306
	Sig.		.182
	95% Confidence Interval for Difference	Lower Bound	-1.619
		Upper Bound	8.003

a. Reference category = 2

Test Results

Measure: MEASURE_1

Transformed Variable: AVERAGE

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	55.564	1	55.564	1.915	.182	.087
Error	580.254	20	29.013			

Test Results

Measure: MEASURE_1

Transformed Variable: AVERAGE

Source	Noncent. Parameter	Observed Power[a]
Contrast	1.915	.261
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
11.554	1.153	9.149	13.960

2. Treatment 1

Estimates

Measure: MEASURE_1

Treatment 1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
control	13.150	1.703	9.597	16.703
treatment	9.958	1.555	6.715	13.202

Pairwise Comparisons

Measure: MEASURE_1

(I) Treatment 1	(J) Treatment 1	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence ...[a]
					Lower Bound
control	treatment	3.192	2.306	.182	-1.619
treatment	control	-3.192	2.306	.182	-8.003

Pairwise Comparisons

Measure: MEASURE_1

(I) Treatment 1	(J) Treatment 1	95% Confidence Interval for ...[a]
		Upper Bound
control	treatment	8.003
treatment	control	1.619

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Measure: MEASURE_1

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	55.564	1	55.564	1.915	.182	.087
Error	580.254	20	29.013			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	1.915	.261
Error		

The F tests the effect of Treatment 1. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

3. time

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
time	Mean	Std. Error	Lower Bound	Upper Bound
1	13.083	1.269	10.435	15.731
2	10.025	1.254	7.410	12.640

Pairwise Comparisons

Measure: MEASURE_1

					95% Confidence Interval for Difference[b]	
(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[b]	Lower Bound	Upper Bound
1	2	3.058*	1.023	.007	.924	5.193
2	1	-3.058*	1.023	.007	-5.193	-.924

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.	Partial Eta Squared
Pillai's trace	.309	8.931[a]	1.000	20.000	.007	.309
Wilks' lambda	.691	8.931[a]	1.000	20.000	.007	.309
Hotelling's trace	.447	8.931[a]	1.000	20.000	.007	.309
Roy's largest root	.447	8.931[a]	1.000	20.000	.007	.309

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	8.931	.811
Wilks' lambda	8.931	.811
Hotelling's trace	8.931	.811
Roy's largest root	8.931	.811

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

a. Exact statistic

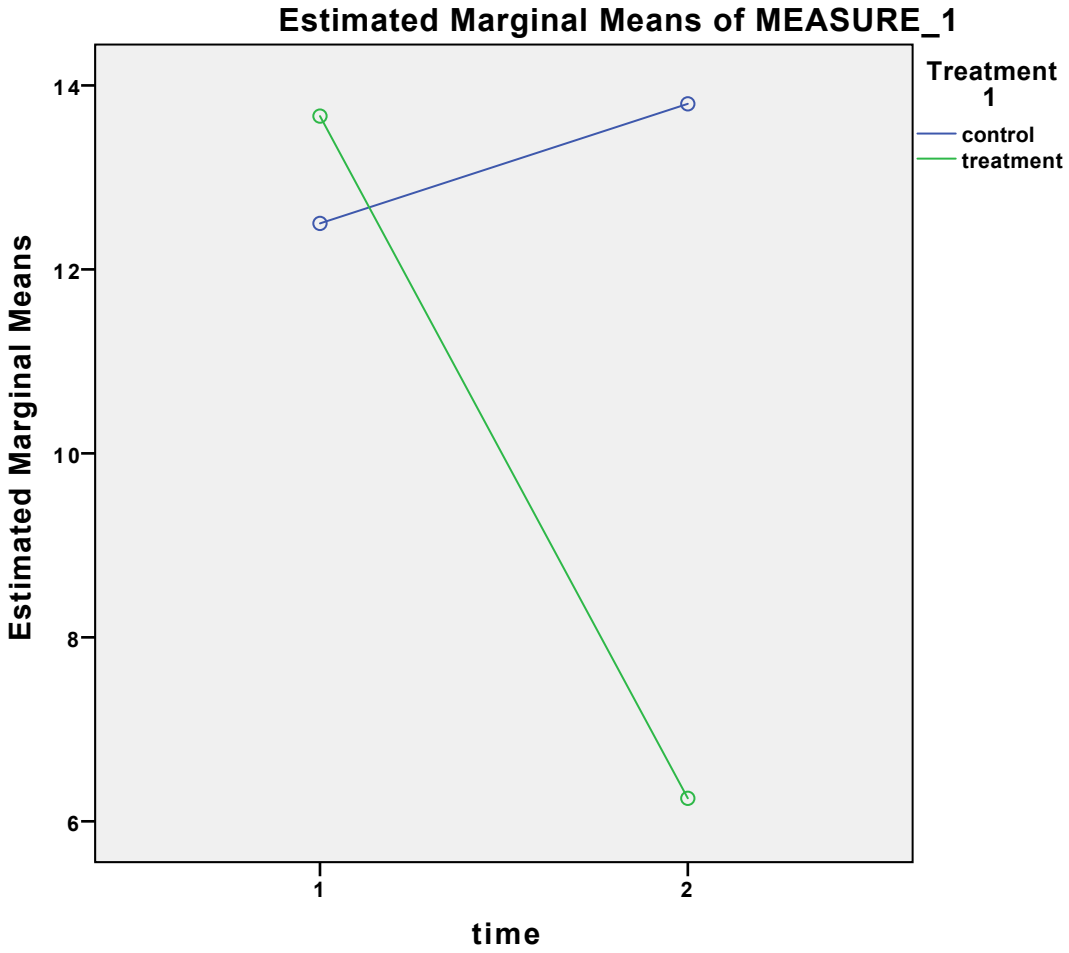
b. Computed using alpha = .05

4. Treatment 1 * time

Measure: MEASURE_1

				95% Confidence Interval	
Treatment 1	time	Mean	Std. Error	Lower Bound	Upper Bound
control	1	12.500	1.875	8.589	16.411
	2	13.800	1.852	9.937	17.663
treatment	1	13.667	1.712	10.096	17.237
	2	6.250	1.690	2.724	9.776

Profile Plots

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lsx'
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  /CELLRANGE=FULL
  /READNAMES=ON
  /DATATYPEMIN PERCENTAGE=95.0
  /HIDDEN IGNORE=YES.
EXECUTE.
DATASET NAME DataSet2 WINDOW=FRONT.
GLM Minute1 Minute2 Minute3 Minute4 Minute5 Minute6 Minute7 Minute8 Minute9 Mi
nute10 BY Treatment
  /WSFACTOR=time 10 Simple
  /MEASURE=brainwavescores
  /CONTRAST(Treatment)=Simple
```

```
  /METHOD=SSTYPE(3)
  /POSTHOC=Treatment(TUKEY)
  /PLOT=PROFILE(time*Treatment)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Treatment) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(time) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Treatment*time)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=time
  /DESIGN=Treatment.
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Variables to Cases

Notes

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Comments		
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Resources	**Processor Time**	**00:00:00.00**
	Elapsed Time	**00:00:00.00**

[DataSet1]

Generated Variables

Name	Label
Index1	<none>
time	Pre-Omission Number
timeco	Pre-Commission Number

Processing Statistics

Variables In	6
Variables Out	5

```
UNIANOVA timeom BY Treatment1 Type
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  /CONTRAST(Type)=Simple
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Treatment1 Type(TUKEY)
  /PLOT=PROFILE(Type*Treatment1 Treatment1*Type)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Treatment1) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Type) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Treatment1*Type) COMPARE(Treatment1) ADJ(BONFERRONI)
  /EMMEANS=TABLES(Treatment1*Type) COMPARE(Type) ADJ(BONFERRONI)
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  /CRITERIA=ALPHA(.05)
  /DESIGN=Treatment1 Type Treatment1*Type.
```

Univariate Analysis of Variance

Notes

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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		UNIANOVA timeom BY Treatment1 Type /CONTRAST (Treatment1)=Simple /CONTRAST(Type) =Simple /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Treatment1 Type(TUKEY) /PLOT=PROFILE (Type*Treatment1 Treatment1*Type) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Treatment1) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (Type) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Treatment1*Type) COMPARE(Treatment1) ADJ(BONFERRONI) /EMMEANS=TABLES (Treatment1*Type) COMPARE(Type) ADJ (BONFERRONI) /PRINT=ETASQ DESCRIPTIVE HOMOGENEITY OPOWER /CRITERIA=ALPHA(.05) /DESIGN=Treatment1 Type Treatment1*Type.

Notes

Resources	Processor Time	00:00:00.49
	Elapsed Time	00:00:01.00

Warnings

Post hoc tests are not performed for Treatment 1 because there are fewer than three groups.

Post hoc tests are not performed for Type because there are fewer than three groups.

Between-Subjects Factors

		N
Treatment 1	control	20
	treatment	24
Type	PostOmissionNumber	22
	PreOmissionNumber	22

Descriptive Statistics

Dependent Variable: Pre- Omission Number

Treatment 1	Type	Mean	Std. Deviation	N
control	PostOmissionNumber	5.90	8.130	10
	PreOmissionNumber	3.60	4.904	10
	Total	4.75	6.640	20
treatment	PostOmissionNumber	.42	.515	12
	PreOmissionNumber	1.58	1.379	12
	Total	1.00	1.180	24
Total	PostOmissionNumber	2.91	6.023	22
	PreOmissionNumber	2.50	3.515	22
	Total	2.70	4.878	44

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

Dependent Variable: Pre- Omission Number

F	df1	df2	Sig.
4.557	3	40	.008

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

a. Design: Intercept + Treatment1 + Type + Treatment1 * Type

Tests of Between-Subjects Effects

Dependent Variable: Pre- Omission Number

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	188.026[a]	3	62.675	3.002	.042	.184
Intercept	360.682	1	360.682	17.275	.000	.302
Treatment1	153.409	1	153.409	7.348	.010	.155
Type	3.503	1	3.503	.168	.684	.004
Treatment1 * Type	32.776	1	32.776	1.570	.218	.038
Error	835.133	40	20.878			
Total	1345.000	44				
Corrected Total	1023.159	43				

Tests of Between-Subjects Effects

Dependent Variable: Pre- Omission Number

Source	Noncent. Parameter	Observed Power[b]
Corrected Model	9.006	.664
Intercept	17.275	.982
Treatment1	7.348	.753
Type	.168	.069
Treatment1 * Type	1.570	.231
Error		
Total		
Corrected Total		

a. R Squared = .184 (Adjusted R Squared = .123)

b. Computed using alpha = .05

Custom Hypothesis Tests Index

1	Contrast Coefficients (L' Matrix)	Simple Contrast (reference category = 2) for Treatment 1
	Transformation Coefficients (M Matrix)	Identity Matrix
	Contrast Results (K Matrix)	Zero Matrix
2	Contrast Coefficients (L' Matrix)	Simple Contrast (reference category = 2) for Type
	Transformation Coefficients (M Matrix)	Identity Matrix
	Contrast Results (K Matrix)	Zero Matrix

Custom Hypothesis Tests #1

Contrast Results (K Matrix)

Treatment 1 Simple Contrast[a]			Dependent Variable: Pre- Omission Number
Level 1 vs. Level 2	Contrast Estimate		3.750
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		3.750
	Std. Error		1.383
	Sig.		.010
	95% Confidence Interval for Difference	Lower Bound	.954
		Upper Bound	6.546

a. Reference category = 2

Test Results

Dependent Variable: Pre- Omission Number

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	153.409	1	153.409	7.348	.010	.155
Error	835.133	40	20.878			

Test Results

Dependent Variable: Pre- Omission Number

Source	Noncent. Parameter	Observed Power[a]
Contrast	7.348	.753
Error		

a. Computed using alpha = .05

Custom Hypothesis Tests #2

Contrast Results (K Matrix)

Type Simple Contrast[a]			Dependent Variable: Pre- Omission Number
Level 1 vs. Level 2	Contrast Estimate		.567
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		.567
	Std. Error		1.383
	Sig.		.684
	95% Confidence Interval for Difference	Lower Bound	-2.229
		Upper Bound	3.363

a. Reference category = 2

Test Results

Dependent Variable: Pre- Omission Number

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	3.503	1	3.503	.168	.684	.004
Error	835.133	40	20.878			

Test Results

Dependent Variable: Pre- Omission Number

Source	Noncent. Parameter	Observed Power[a]
Contrast	.168	.069
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Dependent Variable: Pre- Omission Number

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
2.875	.692	1.477	4.273

2. Treatment 1

Estimates

Dependent Variable: Pre- Omission Number

Treatment 1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
control	4.750	1.022	2.685	6.815
treatment	1.000	.933	-.885	2.885

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

(I) Treatment 1	(J) Treatment 1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]...
					Lower Bound
control	treatment	3.750*	1.383	.010	.954
treatment	control	-3.750*	1.383	.010	-6.546

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

(I) Treatment 1	(J) Treatment 1	95% Confidence Interval for [b] Upper Bound
control	treatment	6.546
treatment	control	-.954

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Omission Number

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	153.409	1	153.409	7.348	.010	.155
Error	835.133	40	20.878			

Univariate Tests

Dependent Variable: Pre- Omission Number

	Noncent. Parameter	Observed Power[a]
Contrast	7.348	.753
Error		

The F tests the effect of Treatment 1. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

3. Type

Estimates

Dependent Variable: Pre- Omission Number

Type	Mean	Std. Error	95% Confidence Interval Lower Bound	Upper Bound
PostOmissionNumber	3.158	.978	1.181	5.135
PreOmissionNumber	2.592	.978	.615	4.569

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence ... Lower Bound
PostOmissionNumber	PreOmissionNumber	.567	1.383	.684	-2.229
PreOmissionNumber	PostOmissionNumber	-.567	1.383	.684	-3.363

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

(I) Type	(J) Type	95% Confidence Interval for ... Upper Bound
PostOmissionNumber	PreOmissionNumber	3.363
PreOmissionNumber	PostOmissionNumber	2.229

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Omission Number

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	3.503	1	3.503	.168	.684	.004
Error	835.133	40	20.878			

Univariate Tests

Dependent Variable: Pre- Omission Number

	Noncent. Parameter	Observed Power[a]
Contrast	.168	.069
Error		

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

a. Computed using alpha = .05

4. Treatment 1 * Type

Estimates

Dependent Variable: Pre- Omission Number

Treatment 1	Type	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
control	PostOmissionNumber	5.900	1.445	2.980	8.820
	PreOmissionNumber	3.600	1.445	.680	6.520
treatment	PostOmissionNumber	.417	1.319	-2.249	3.083
	PreOmissionNumber	1.583	1.319	-1.083	4.249

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

Type	(I) Treatment 1	(J) Treatment 1	Mean Difference (I-J)	Std. Error	Sig.[b]
PostOmissionNumber	control	treatment	5.483*	1.956	.008
	treatment	control	-5.483*	1.956	.008
PreOmissionNumber	control	treatment	2.017	1.956	.309
	treatment	control	-2.017	1.956	.309

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

Type	(I) Treatment 1	(J) Treatment 1	95% Confidence Interval for Difference[b]	
			Lower Bound	Upper Bound
PostOmissionNumber	control	treatment	1.529	9.437
	treatment	control	-9.437	-1.529
PreOmissionNumber	control	treatment	-1.937	5.971
	treatment	control	-5.971	1.937

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Omission Number

Type		Sum of Squares	df	Mean Square	F	Sig.
PostOmissionNumber	Contrast	164.002	1	164.002	7.855	.008
	Error	835.133	40	20.878		
PreOmissionNumber	Contrast	22.183	1	22.183	1.063	.309
	Error	835.133	40	20.878		

Univariate Tests

Dependent Variable: Pre- Omission Number

Type		Partial Eta Squared	Noncent. Parameter	Observed Power[a]
PostOmissionNumber	Contrast	.164	7.855	.781
	Error			
PreOmissionNumber	Contrast	.026	1.063	.172
	Error			

Each F tests the simple effects of Treatment 1 within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

5. Treatment 1 * Type

Estimates

Dependent Variable: Pre- Omission Number

Treatment 1	Type	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
control	PostOmissionNumber	5.900	1.445	2.980	8.820
	PreOmissionNumber	3.600	1.445	.680	6.520
treatment	PostOmissionNumber	.417	1.319	-2.249	3.083
	PreOmissionNumber	1.583	1.319	-1.083	4.249

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

Treatment 1	(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	Sig.[a]
control	PostOmissionNumber	PreOmissionNumber	2.300	2.043	.267
	PreOmissionNumber	PostOmissionNumber	-2.300	2.043	.267
treatment	PostOmissionNumber	PreOmissionNumber	-1.167	1.865	.535
	PreOmissionNumber	PostOmissionNumber	1.167	1.865	.535

Pairwise Comparisons

Dependent Variable: Pre- Omission Number

			95% Confidence Interval for Difference[a]	
Treatment 1	(I) Type	(J) Type	Lower Bound	Upper Bound
control	PostOmissionNumber	PreOmissionNumber	-1.830	6.430
	PreOmissionNumber	PostOmissionNumber	-6.430	1.830
treatment	PostOmissionNumber	PreOmissionNumber	-4.937	2.603
	PreOmissionNumber	PostOmissionNumber	-2.603	4.937

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Omission Number

Treatment 1		Sum of Squares	df	Mean Square	F	Sig.
control	Contrast	26.450	1	26.450	1.267	.267
	Error	835.133	40	20.878		
treatment	Contrast	8.167	1	8.167	.391	.535
	Error	835.133	40	20.878		

Univariate Tests

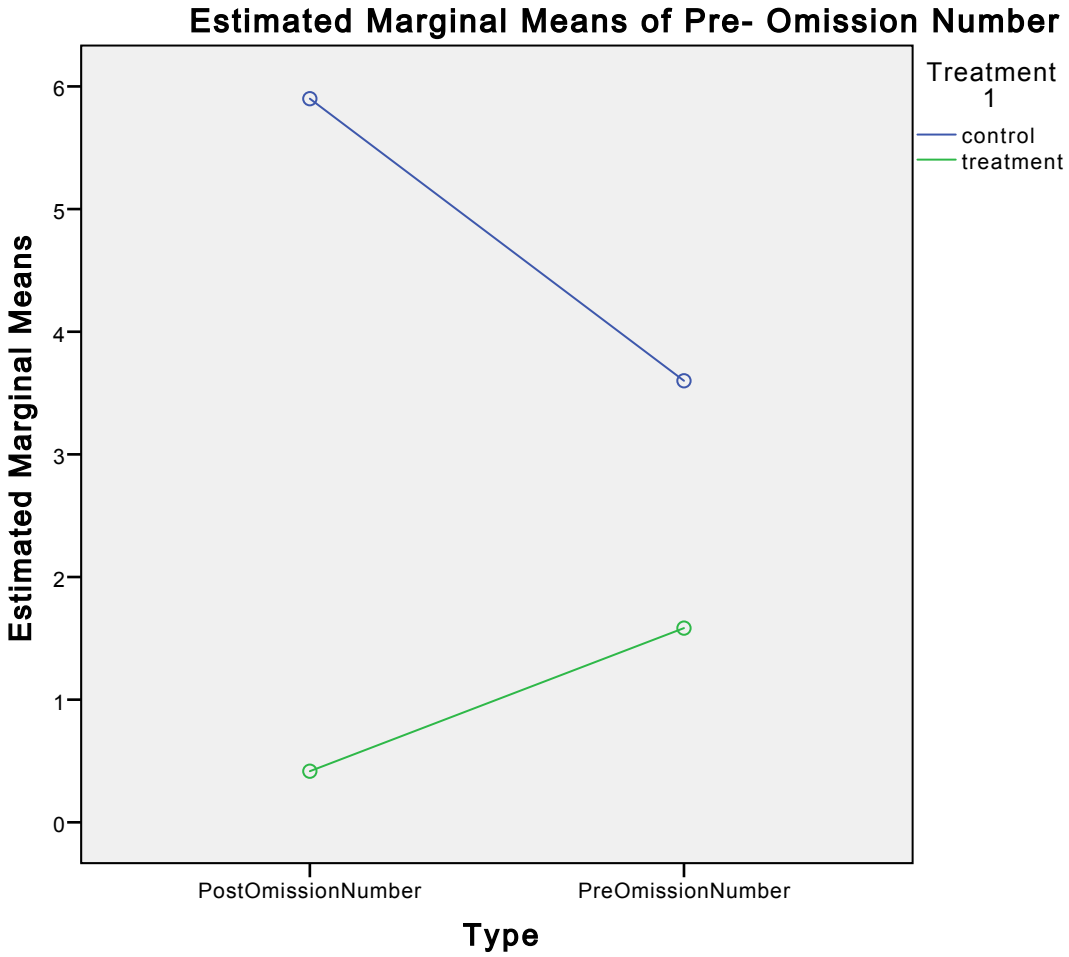
Dependent Variable: Pre- Omission Number

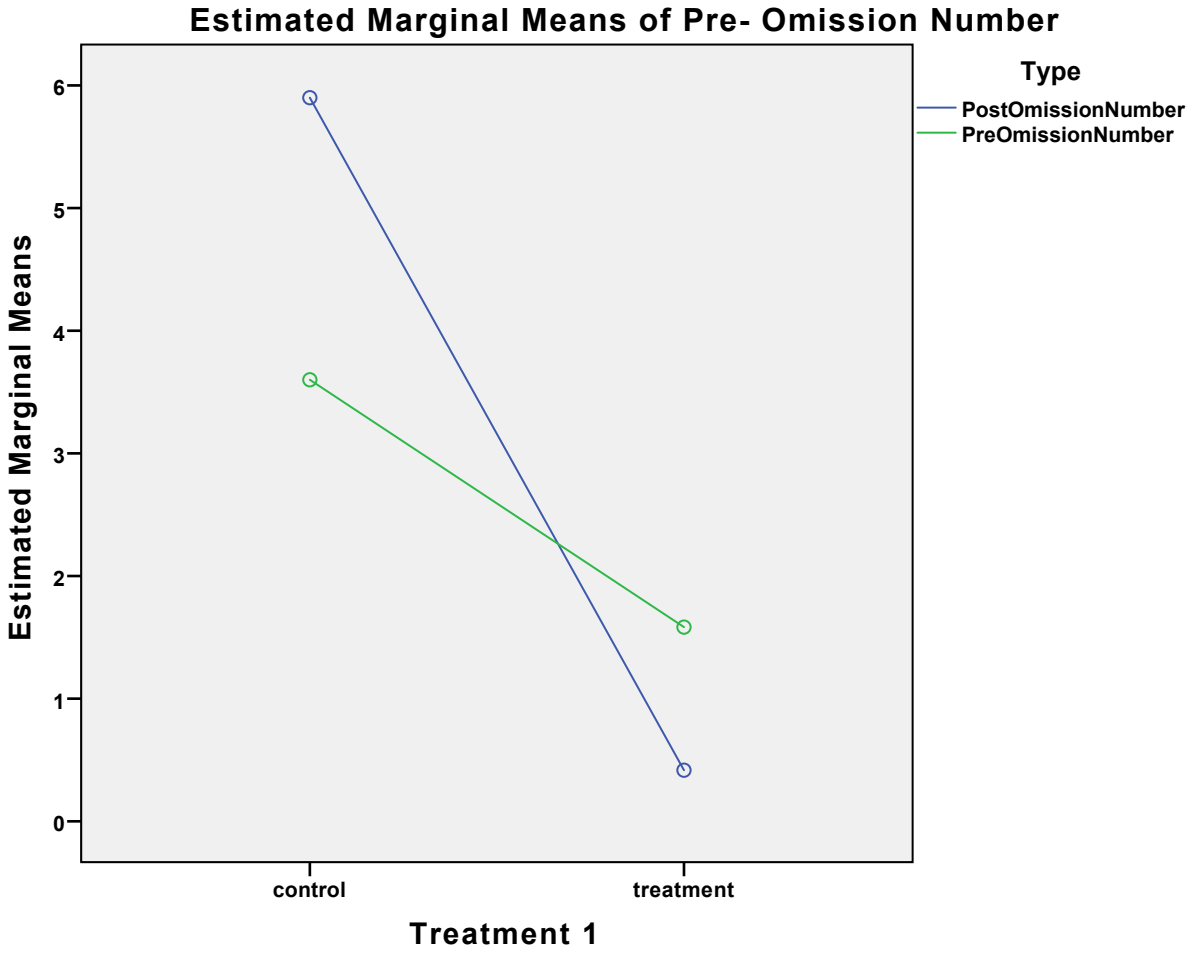
Treatment 1		Partial Eta Squared	Noncent. Parameter	Observed Power[a]
control	Contrast	.031	1.267	.196
	Error			
treatment	Contrast	.010	.391	.094
	Error			

Each F tests the simple effects of Type within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Profile Plots






```
UNIANOVA timeco BY Treatment1 Type
  /CONTRAST(Treatment1)=Simple
  /CONTRAST(Type)=Simple
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Treatment1 Type(TUKEY)
  /PLOT=PROFILE(Type*Treatment1 Treatment1*Type)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Treatment1) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Type) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Treatment1*Type) COMPARE(Treatment1) ADJ(BONFERRONI)
  /EMMEANS=TABLES(Treatment1*Type) COMPARE(Type) ADJ(BONFERRONI)
  /PRINT=ETASQ DESCRIPTIVE HOMOGENEITY OPOWER
  /CRITERIA=ALPHA(.05)
  /DESIGN=Treatment1 Type Treatment1*Type.
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Univariate Analysis of Variance

Notes

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Comments		
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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		UNIANOVA timeco BY Treatment1 Type /CONTRAST (Treatment1)=Simple /CONTRAST(Type) =Simple /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Treatment1 Type(TUKEY) /PLOT=PROFILE (Type*Treatment1 Treatment1*Type) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Treatment1) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (Type) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Treatment1*Type) COMPARE(Treatment1) ADJ(BONFERRONI) /EMMEANS=TABLES (Treatment1*Type) COMPARE(Type) ADJ (BONFERRONI) /PRINT=ETASQ DESCRIPTIVE HOMOGENEITY OPOWER /CRITERIA=ALPHA(.05) /DESIGN=Treatment1 Type Treatment1*Type.

Notes

Resources	Processor Time	00:00:00.37
	Elapsed Time	00:00:00.00

Warnings

Post hoc tests are not performed for Treatment 1 because there are fewer than three groups.

Post hoc tests are not performed for Type because there are fewer than three groups.

Between-Subjects Factors

		N
Treatment 1	control	20
	treatment	24
Type	PostOmissionNumber	22
	PreOmissionNumber	22

Descriptive Statistics

Dependent Variable: Pre- Commission Number

Treatment 1	Type	Mean	Std. Deviation	N
control	PostOmissionNumber	13.80	6.374	10
	PreOmissionNumber	12.50	6.060	10
	Total	13.15	6.089	20
treatment	PostOmissionNumber	6.25	5.396	12
	PreOmissionNumber	13.67	5.821	12
	Total	9.96	6.669	24
Total	PostOmissionNumber	9.68	6.890	22
	PreOmissionNumber	13.14	5.817	22
	Total	11.41	6.539	44

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

Dependent Variable: Pre- Commission Number

F	df1	df2	Sig.
.425	3	40	.736

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

a. Design: Intercept + Treatment1 + Type + Treatment1 * Type

Tests of Between-Subjects Effects

Dependent Variable: Pre- Commission Number

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	449.620[a]	3	149.873	4.316	.010
Intercept	5825.401	1	5825.401	167.756	.000
Treatment1	111.128	1	111.128	3.200	.081
Type	102.037	1	102.037	2.938	.094
Treatment1 * Type	207.219	1	207.219	5.967	.019
Error	1389.017	40	34.725		
Total	7566.000	44			
Corrected Total	1838.636	43			

Tests of Between-Subjects Effects

Dependent Variable: Pre- Commission Number

Source	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	.245	12.948	.831
Intercept	.807	167.756	1.000
Treatment1	.074	3.200	.415
Type	.068	2.938	.387
Treatment1 * Type	.130	5.967	.664
Error			
Total			
Corrected Total			

a. R Squared = .245 (Adjusted R Squared = .188)

b. Computed using alpha = .05

Custom Hypothesis Tests Index

1	Contrast Coefficients (L' Matrix)	Simple Contrast (reference category = 2) for Treatment 1
	Transformation Coefficients (M Matrix)	Identity Matrix
	Contrast Results (K Matrix)	Zero Matrix
2	Contrast Coefficients (L' Matrix)	Simple Contrast (reference category = 2) for Type
	Transformation Coefficients (M Matrix)	Identity Matrix
	Contrast Results (K Matrix)	Zero Matrix

Custom Hypothesis Tests #1

Contrast Results (K Matrix)

Treatment 1 Simple Contrast[a]			Dependent Variable: Pre-Commission Number
Level 1 vs. Level 2	Contrast Estimate		3.192
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		3.192
	Std. Error		1.784
	Sig.		.081
	95% Confidence Interval for Difference	Lower Bound	-.414
		Upper Bound	6.798

a. Reference category = 2

Test Results

Dependent Variable: Pre- Commission Number

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	111.128	1	111.128	3.200	.081	.074
Error	1389.017	40	34.725			

Test Results

Dependent Variable: Pre- Commission Number

Source	Noncent. Parameter	Observed Power[a]
Contrast	3.200	.415
Error		

a. Computed using alpha = .05

Custom Hypothesis Tests #2

Contrast Results (K Matrix)

Type Simple Contrast[a]			Dependent Variable: Pre- Commission Number
Level 1 vs. Level 2	Contrast Estimate		-3.058
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-3.058
	Std. Error		1.784
	Sig.		.094
	95% Confidence Interval for Difference	Lower Bound	-6.664
		Upper Bound	.548

a. Reference category = 2

Test Results

Dependent Variable: Pre- Commission Number

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	102.037	1	102.037	2.938	.094	.068
Error	1389.017	40	34.725			

Test Results

Dependent Variable: Pre- Commission Number

Source	Noncent. Parameter	Observed Power[a]
Contrast	2.938	.387
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Dependent Variable: Pre- Commission Number

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
11.554	.892	9.751	13.357

2. Treatment 1

Estimates

Dependent Variable: Pre- Commission Number

Treatment 1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
control	13.150	1.318	10.487	15.813
treatment	9.958	1.203	7.527	12.389

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

(I) Treatment 1	(J) Treatment 1	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence ... [a]
					Lower Bound
control	treatment	3.192	1.784	.081	-.414
treatment	control	-3.192	1.784	.081	-6.798

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

(I) Treatment 1	(J) Treatment 1	95% Confidence Interval for ... [a]
		Upper Bound
control	treatment	6.798
treatment	control	.414

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Commission Number

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	111.128	1	111.128	3.200	.081	.074
Error	1389.017	40	34.725			

Univariate Tests

Dependent Variable: Pre- Commission Number

	Noncent. Parameter	Observed Power[a]
Contrast	3.200	.415
Error		

The F tests the effect of Treatment 1. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

3. Type

Estimates

Dependent Variable: Pre- Commission Number

			95% Confidence Interval	
Type	Mean	Std. Error	Lower Bound	Upper Bound
PostOmissionNumber	10.025	1.262	7.475	12.575
PreOmissionNumber	13.083	1.262	10.534	15.633

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

					95% Confidence [a]...
(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	Sig.[a]	Lower Bound
PostOmissionNumber	PreOmissionNumber	-3.058	1.784	.094	-6.664
PreOmissionNumber	PostOmissionNumber	3.058	1.784	.094	-.548

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

(I) Type	(J) Type	95% Confidence Interval for[a]... Upper Bound
PostOmissionNumber	PreOmissionNumber	.548
PreOmissionNumber	PostOmissionNumber	6.664

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Commission Number

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	102.037	1	102.037	2.938	.094	.068
Error	1389.017	40	34.725			

Univariate Tests

Dependent Variable: Pre- Commission Number

	Noncent. Parameter	Observed Power[a]
Contrast	2.938	.387
Error		

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

a. Computed using alpha = .05

4. Treatment 1 * Type

Estimates

Dependent Variable: Pre- Commission Number

Treatment 1	Type	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
control	PostOmissionNumber	13.800	1.863	10.034	17.566
	PreOmissionNumber	12.500	1.863	8.734	16.266
treatment	PostOmissionNumber	6.250	1.701	2.812	9.688
	PreOmissionNumber	13.667	1.701	10.229	17.105

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

Type	(I) Treatment 1	(J) Treatment 1	Mean Difference (I-J)	Std. Error	Sig.[b]
PostOmissionNumber	control	treatment	7.550*	2.523	.005
	treatment	control	-7.550*	2.523	.005
PreOmissionNumber	control	treatment	-1.167	2.523	.646
	treatment	control	1.167	2.523	.646

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

Type	(I) Treatment 1	(J) Treatment 1	95% Confidence Interval for Difference[b]	
			Lower Bound	Upper Bound
PostOmissionNumber	control	treatment	2.451	12.649
	treatment	control	-12.649	-2.451
PreOmissionNumber	control	treatment	-6.266	3.933
	treatment	control	-3.933	6.266

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Commission Number

Type		Sum of Squares	df	Mean Square	F	Sig.
PostOmissionNumber	Contrast	310.923	1	310.923	8.954	.005
	Error	1389.017	40	34.725		
PreOmissionNumber	Contrast	7.424	1	7.424	.214	.646
	Error	1389.017	40	34.725		

Univariate Tests

Dependent Variable: Pre- Commission Number

Type		Partial Eta Squared	Noncent. Parameter	Observed Power[a]
PostOmissionNumber	Contrast	.183	8.954	.831
	Error			
PreOmissionNumber	Contrast	.005	.214	.074
	Error			

Each F tests the simple effects of Treatment 1 within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

5. Treatment 1 * Type

Estimates

Dependent Variable: Pre- Commission Number

Treatment 1	Type	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
control	PostOmissionNumber	13.800	1.863	10.034	17.566
	PreOmissionNumber	12.500	1.863	8.734	16.266
treatment	PostOmissionNumber	6.250	1.701	2.812	9.688
	PreOmissionNumber	13.667	1.701	10.229	17.105

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

Treatment 1	(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	Sig.[b]
control	PostOmissionNumber	PreOmissionNumber	1.300	2.635	.625
	PreOmissionNumber	PostOmissionNumber	-1.300	2.635	.625
treatment	PostOmissionNumber	PreOmissionNumber	-7.417*	2.406	.004
	PreOmissionNumber	PostOmissionNumber	7.417*	2.406	.004

Pairwise Comparisons

Dependent Variable: Pre- Commission Number

Treatment 1	(I) Type	(J) Type	95% Confidence Interval for Difference[b]	
			Lower Bound	Upper Bound
control	PostOmissionNumber	PreOmissionNumber	-4.026	6.626
	PreOmissionNumber	PostOmissionNumber	-6.626	4.026
treatment	PostOmissionNumber	PreOmissionNumber	-12.279	-2.554
	PreOmissionNumber	PostOmissionNumber	2.554	12.279

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Pre- Commission Number

Treatment 1		Sum of Squares	df	Mean Square	F	Sig.
control	Contrast	8.450	1	8.450	.243	.625
	Error	1389.017	40	34.725		
treatment	Contrast	330.042	1	330.042	9.504	.004
	Error	1389.017	40	34.725		

Univariate Tests

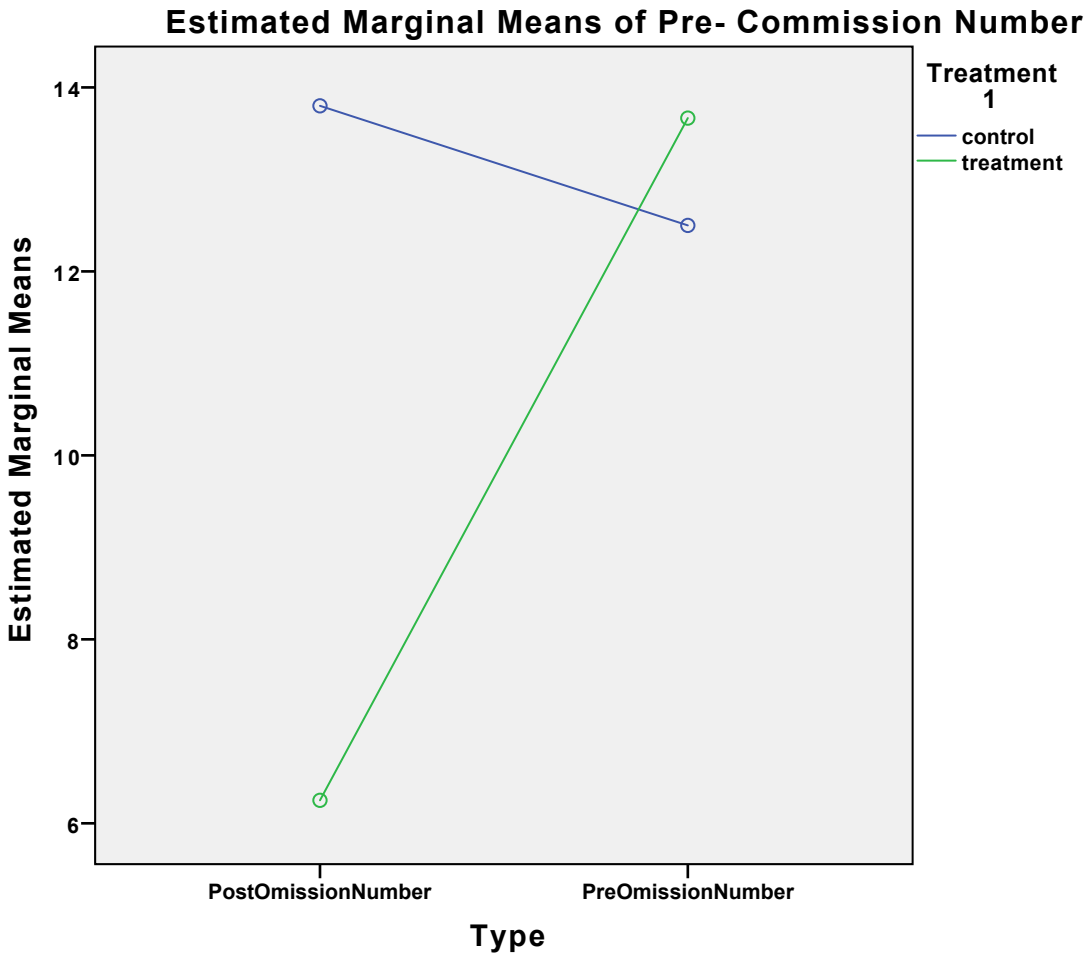
Dependent Variable: Pre- Commission Number

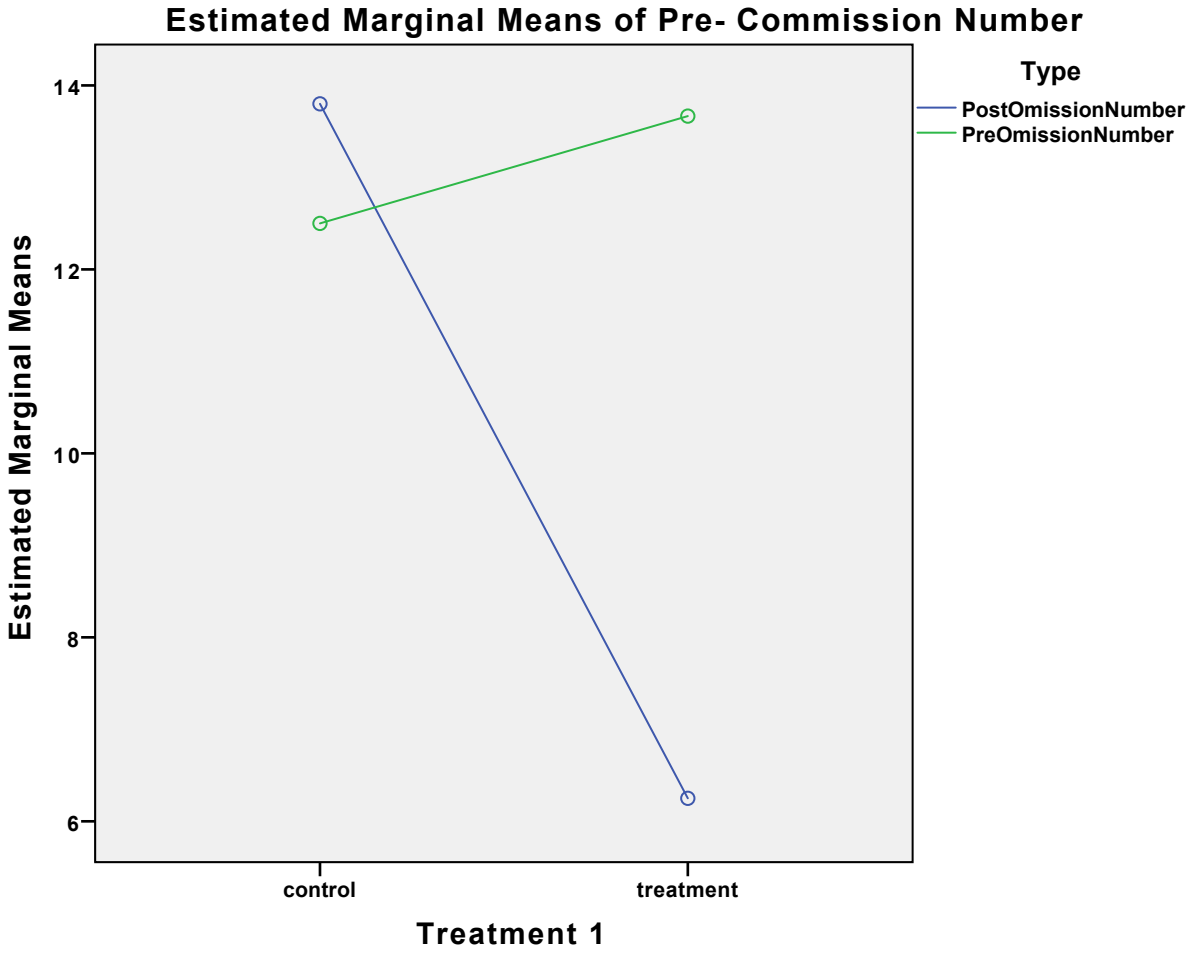
Treatment 1		Partial Eta Squared	Noncent. Parameter	Observed Power[a]
control	Contrast	.006	.243	.077
	Error			
treatment	Contrast	.192	9.504	.853
	Error			

Each F tests the simple effects of Type within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Profile Plots


Estimated Marginal Means of Pre- Commission Number
Estimated Marginal Means
14
12
10
8
6
PostOmissionNumber
PreOmissionNumber
Type
Treatment 1
control
treatment




```
 DATASET ACTIVATE DataSet1.
VARSTOCASES
  /MAKE time FROM PreOmissionNumberPostOmissionNumber
  /MAKE timeco FROM PreCommissionNumberPostCommissionNumber
  /INDEX=Index1(time)
  /KEEP=Treatment1 SubjectID
  /NULL=KEEP.
```

General Linear Model

Notes

Output Created		28-AUG-2019 13:18:...
Comments		
Input	Active Dataset	DataSet2
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
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 Minute1 Minute2 Minute3 Minute4 Minute5 Minute6 Minute7 Minute8 Minute9 Minute10 BY Treatment /WSFACTOR=time 10 Simple /MEASURE=brainwavescores /CONTRAST (Treatment)=Simple /METHOD=SSTYPE(3) /POSTHOC=Treatment (TUKEY) /PLOT=PROFILE (time*Treatment) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Treatment) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (time) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Treatment*time) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=time /DESIGN=Treatment.
Resources	Processor Time	00:00:00.35
	Elapsed Time	00:00:00.00

[DataSet2]

Warnings

Box's Test of Equality of Covariance Matrices is not computed because there are fewer than two nonsingular cell covariance matrices.
Post hoc tests are not performed for Treatment because there are fewer than three groups.

Within-Subjects Factors

Measure: brainwavescores

time	Dependent Variable
1	Minute1
2	Minute2
3	Minute3
4	Minute4
5	Minute5
6	Minute6
7	Minute7
8	Minute8
9	Minute9
10	Minute10

Between-Subjects Factors

		N
Treatment	Control	10
	Treatment	12

Descriptive Statistics

	Treatment	Mean	Std. Deviation	N
Minute1	Control	44.6576275	7.13410050	10
	Treatment	49.8319203	11.4472661	12
	Total	47.4799690	9.86946625	22
Minute2	Control	44.3783337	6.22710165	10
	Treatment	48.7472218	13.8814202	12
	Total	46.7613635	11.0684777	22
Minute3	Control	45.9500008	8.31733319	10
	Treatment	55.2430547	14.1028910	12
	Total	51.0189393	12.5004159	22
Minute4	Control	45.7566666	9.98566990	10
	Treatment	51.3513896	12.0287968	12
	Total	48.8083337	11.2541341	22
Minute5	Control	48.8133327	9.59331606	10
	Treatment	52.5208330	9.93595949	12
	Total	50.8356056	9.73265830	22
Minute6	Control	48.0033333	9.15034127	10
	Treatment	50.4986115	9.36648804	12
	Total	49.3643941	9.13539178	22
Minute7	Control	48.4333328	10.8124018	10
	Treatment	53.0694447	10.2373502	12
	Total	50.9621211	10.5158531	22
Minute8	Control	46.9616669	11.4682764	10
	Treatment	51.8847222	12.0981042	12
	Total	49.6469698	11.8037456	22
Minute9	Control	43.8766666	11.0728126	10
	Treatment	52.1333334	11.9861540	12
	Total	48.3803030	12.0626571	22
Minute10	Control	43.7091850	10.3803964	10
	Treatment	47.5928593	11.4590914	12
	Total	45.8275528	10.9031727	22

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
time	Pillai's Trace	.500	1.336[b]	9.000	12.000	.314
	Wilks' Lambda	.500	1.336[b]	9.000	12.000	.314
	Hotelling's Trace	1.002	1.336[b]	9.000	12.000	.314
	Roy's Largest Root	1.002	1.336[b]	9.000	12.000	.314
time * Treatment	Pillai's Trace	.232	.402[b]	9.000	12.000	.911
	Wilks' Lambda	.768	.402[b]	9.000	12.000	.911
	Hotelling's Trace	.301	.402[b]	9.000	12.000	.911
	Roy's Largest Root	.301	.402[b]	9.000	12.000	.911

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
time	Pillai's Trace	.500	12.024	.383
	Wilks' Lambda	.500	12.024	.383
	Hotelling's Trace	.500	12.024	.383
	Roy's Largest Root	.500	12.024	.383
time * Treatment	Pillai's Trace	.232	3.617	.129
	Wilks' Lambda	.232	3.617	.129
	Hotelling's Trace	.232	3.617	.129
	Roy's Largest Root	.232	3.617	.129

a. Design: Intercept + Treatment
Within Subjects Design: time

b. Exact statistic

c. Computed using alpha = .05

Mauchly's Test of Sphericity[a]

Measure: brainwavescores

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser
time	.019	66.352	44	.021	.436

Mauchly's Test of Sphericity[a]

Measure: brainwavescores

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
time	.583	.111

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

a. Design: Intercept + Treatment
Within Subjects Design: time

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: brainwavescores

Source		Type III Sum of Squares	df	Mean Square	F
time	Sphericity Assumed	632.256	9	70.251	1.152
	Greenhouse-Geisser	632.256	3.927	160.993	1.152
	Huynh-Feldt	632.256	5.251	120.406	1.152
	Lower-bound	632.256	1.000	632.256	1.152
time * Treatment	Sphericity Assumed	210.561	9	23.396	.384
	Greenhouse-Geisser	210.561	3.927	53.616	.384
	Huynh-Feldt	210.561	5.251	40.099	.384
	Lower-bound	210.561	1.000	210.561	.384
Error(time)	Sphericity Assumed	10978.839	180	60.994	
	Greenhouse-Geisser	10978.839	78.544	139.779	
	Huynh-Feldt	10978.839	105.021	104.540	
	Lower-bound	10978.839	20.000	548.942	

Tests of Within-Subjects Effects

Measure: brainwavescores

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Sphericity Assumed	.329	.054	10.366	.559
	Greenhouse-Geisser	.338	.054	4.523	.343
	Huynh-Feldt	.338	.054	6.048	.406
	Lower-bound	.296	.054	1.152	.176
time * Treatment	Sphericity Assumed	.942	.019	3.452	.188
	Greenhouse-Geisser	.816	.019	1.506	.133
	Huynh-Feldt	.867	.019	2.014	.149
	Lower-bound	.543	.019	.384	.091
Error(time)	Sphericity Assumed				
	Greenhouse-Geisser				
	Huynh-Feldt				
	Lower-bound				

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: brainwavescores

Source	time	Type III Sum of Squares	df	Mean Square	F
time	Level 1 vs. Level 10	55.419	1	55.419	.383
	Level 2 vs. Level 10	18.137	1	18.137	.093
	Level 3 vs. Level 10	533.630	1	533.630	3.485
	Level 4 vs. Level 10	183.871	1	183.871	1.273
	Level 5 vs. Level 10	548.964	1	548.964	5.422
	Level 6 vs. Level 10	282.756	1	282.756	2.629
	Level 7 vs. Level 10	567.572	1	567.572	5.354
	Level 8 vs. Level 10	310.457	1	310.457	2.116
	Level 9 vs. Level 10	120.899	1	120.899	.798
time * Treatment	Level 1 vs. Level 10	9.086	1	9.086	.063
	Level 2 vs. Level 10	1.284	1	1.284	.007

Tests of Within-Subjects Contrasts

Measure: brainwavescores

Source	time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Level 1 vs. Level 10	.543	.019	.383	.091
	Level 2 vs. Level 10	.763	.005	.093	.060
	Level 3 vs. Level 10	.077	.148	3.485	.428
	Level 4 vs. Level 10	.273	.060	1.273	.189
	Level 5 vs. Level 10	.030	.213	5.422	.601
	Level 6 vs. Level 10	.121	.116	2.629	.339
	Level 7 vs. Level 10	.031	.211	5.354	.596
	Level 8 vs. Level 10	.161	.096	2.116	.283
	Level 9 vs. Level 10	.382	.038	.798	.136
time * Treatment	Level 1 vs. Level 10	.805	.003	.063	.057
	Level 2 vs. Level 10	.936	.000	.007	.051

Tests of Within-Subjects Contrasts

Measure: brainwavescores

Source	time	Type III Sum of Squares	df	Mean Square	F
	Level 3 vs. Level 10	159.608	1	159.608	1.042
	Level 4 vs. Level 10	15.969	1	15.969	.111
	Level 5 vs. Level 10	.169	1	.169	.002
	Level 6 vs. Level 10	10.514	1	10.514	.098
	Level 7 vs. Level 10	3.088	1	3.088	.029
	Level 8 vs. Level 10	5.893	1	5.893	.040
	Level 9 vs. Level 10	104.308	1	104.308	.689
Error(time)	Level 1 vs. Level 10	2891.705	20	144.585	
	Level 2 vs. Level 10	3897.799	20	194.890	
	Level 3 vs. Level 10	3062.277	20	153.114	
	Level 4 vs. Level 10	2889.443	20	144.472	
	Level 5 vs. Level 10	2025.049	20	101.252	
	Level 6 vs. Level 10	2150.694	20	107.535	
	Level 7 vs. Level 10	2120.257	20	106.013	
	Level 8 vs. Level 10	2934.168	20	146.708	
	Level 9 vs. Level 10	3028.574	20	151.429	

Tests of Within-Subjects Contrasts

Measure: brainwavescores

Source	time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
	Level 3 vs. Level 10	.319	.050	1.042	.163
	Level 4 vs. Level 10	.743	.005	.111	.062
	Level 5 vs. Level 10	.968	.000	.002	.050
	Level 6 vs. Level 10	.758	.005	.098	.060
	Level 7 vs. Level 10	.866	.001	.029	.053
	Level 8 vs. Level 10	.843	.002	.040	.054
	Level 9 vs. Level 10	.416	.033	.689	.124
Error(time)	Level 1 vs. Level 10				
	Level 2 vs. Level 10				
	Level 3 vs. Level 10				
	Level 4 vs. Level 10				
	Level 5 vs. Level 10				
	Level 6 vs. Level 10				
	Level 7 vs. Level 10				
	Level 8 vs. Level 10				
	Level 9 vs. Level 10				

a. Computed using alpha = .05

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

	F	df1	df2	Sig.
Minute1	2.042	1	20	.168
Minute2	6.042	1	20	.023
Minute3	5.444	1	20	.030
Minute4	.662	1	20	.426
Minute5	.491	1	20	.492
Minute6	.105	1	20	.749
Minute7	.007	1	20	.935
Minute8	.019	1	20	.893
Minute9	.266	1	20	.612
Minute10	.000	1	20	.991

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

a. Design: Intercept + Treatment
Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: brainwavescores

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	51683.668	1	51683.668	832.381	.000	.977
Treatment	149.387	1	149.387	2.406	.137	.107
Error	1241.828	20	62.091			

Tests of Between-Subjects Effects

Measure: brainwavescores

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	832.381	1.000
Treatment	2.406	.315
Error		

a. Computed using alpha = .05

Custom Hypothesis Tests

Contrast Results (K Matrix)

Treatment Simple Contrast[a]			Averaged Variable brainwavescores
Level 1 vs. Level 2	Contrast Estimate		-5.233
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-5.233
	Std. Error		3.374
	Sig.		.137
	95% Confidence Interval for Difference	Lower Bound	-12.271
		Upper Bound	1.805

a. Reference category = 2

Test Results

Measure: brainwavescores

Transformed Variable: AVERAGE

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	149.387	1	149.387	2.406	.137	.107
Error	1241.828	20	62.091			

Test Results

Measure: brainwavescores

Transformed Variable: AVERAGE

Source	Noncent. Parameter	Observed Power[a]
Contrast	2.406	.315
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: brainwavescores

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
48.671	1.687	45.152	52.190

2. Treatment

Estimates

Measure: brainwavescores

Treatment	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control	46.054	2.492	40.856	51.252
Treatment	51.287	2.275	46.542	56.032

Pairwise Comparisons

Measure: brainwavescores

(I) Treatment	(J) Treatment	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Control	Treatment	-5.233	3.374	.137	-12.271	1.805
Treatment	Control	5.233	3.374	.137	-1.805	12.271

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Measure: brainwavescores

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	149.387	1	149.387	2.406	.137	.107
Error	1241.828	20	62.091			

Univariate Tests

Measure: brainwavescores

	Noncent. Parameter	Observed Power[a]
Contrast	2.406	.315
Error		

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

a. Computed using alpha = .05

3. time

Estimates

Measure: brainwavescores

time	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	47.245	2.086	42.893	51.597
2	46.563	2.378	41.601	51.524
3	50.597	2.538	45.303	55.890
4	48.554	2.388	43.572	53.536
5	50.667	2.094	46.298	55.036
6	49.251	1.985	45.111	53.391
7	50.751	2.248	46.062	55.440
8	49.423	2.530	44.145	54.701
9	48.005	2.480	42.832	53.178
10	45.651	2.352	40.745	50.557

Pairwise Comparisons

Measure: brainwavescores

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	.682	1.593	1.000	-5.379	6.743
	3	-3.352	1.749	1.000	-10.005	3.302
	4	-1.309	2.041	1.000	-9.072	6.454
	5	-3.422	2.315	1.000	-12.230	5.385
	6	-2.006	2.388	1.000	-11.093	7.080
	7	-3.507	2.693	1.000	-13.753	6.740
	8	-2.178	3.146	1.000	-14.147	9.790
	9	-.760	3.037	1.000	-12.313	10.792
	10	1.594	2.574	1.000	-8.200	11.387
2	1	-.682	1.593	1.000	-6.743	5.379
	3	-4.034	1.806	1.000	-10.905	2.837
	4	-1.991	2.112	1.000	-10.026	6.043
	5	-4.104	2.457	1.000	-13.451	5.243
	6	-2.688	2.648	1.000	-12.761	7.385
	7	-4.189	2.963	1.000	-15.460	7.083
	8	-2.860	3.299	1.000	-15.412	9.691
	9	-1.442	3.281	1.000	-13.923	11.038
	10	.912	2.989	1.000	-10.458	12.282

Pairwise Comparisons

Measure: brainwavescores

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
3	1	3.352	1.749	1.000	-3.302	10.005
	2	4.034	1.806	1.000	-2.837	10.905
	4	2.042	1.533	1.000	-3.788	7.873
	5	-.071	2.067	1.000	-7.935	7.794
	6	1.346	2.731	1.000	-9.045	11.736
	7	-.155	2.535	1.000	-9.799	9.489
	8	1.173	2.856	1.000	-9.692	12.039
	9	2.592	2.864	1.000	-8.303	13.486
	10	4.946	2.649	1.000	-5.133	15.024
4	1	1.309	2.041	1.000	-6.454	9.072
	2	1.991	2.112	1.000	-6.043	10.026
	3	-2.042	1.533	1.000	-7.873	3.788
	5	-2.113	1.811	1.000	-9.001	4.775
	6	-.697	2.208	1.000	-9.096	7.702
	7	-2.197	2.260	1.000	-10.795	6.401
	8	-.869	2.577	1.000	-10.675	8.936
	9	.549	2.410	1.000	-8.620	9.718
	10	2.903	2.573	1.000	-6.887	12.693
5	1	3.422	2.315	1.000	-5.385	12.230
	2	4.104	2.457	1.000	-5.243	13.451
	3	.071	2.067	1.000	-7.794	7.935
	4	2.113	1.811	1.000	-4.775	9.001
	6	1.416	1.767	1.000	-5.305	8.137
	7	-.084	1.640	1.000	-6.325	6.156
	8	1.244	1.721	1.000	-5.303	7.790
	9	2.662	1.903	1.000	-4.578	9.902
	10	5.016	2.154	1.000	-3.179	13.212
6	1	2.006	2.388	1.000	-7.080	11.093
	2	2.688	2.648	1.000	-7.385	12.761

Pairwise Comparisons

Measure: brainwavescores

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
	3	-1.346	2.731	1.000	-11.736	9.045
	4	.697	2.208	1.000	-7.702	9.096
	5	-1.416	1.767	1.000	-8.137	5.305
	7	-1.500	1.880	1.000	-8.654	5.653
	8	-.172	2.059	1.000	-8.005	7.660
	9	1.246	2.087	1.000	-6.694	9.186
	10	3.600	2.220	1.000	-4.846	12.046
7	1	3.507	2.693	1.000	-6.740	13.753
	2	4.189	2.963	1.000	-7.083	15.460
	3	.155	2.535	1.000	-9.489	9.799
	4	2.197	2.260	1.000	-6.401	10.795
	5	.084	1.640	1.000	-6.156	6.325
	6	1.500	1.880	1.000	-5.653	8.654
	8	1.328	1.918	1.000	-5.969	8.625
	9	2.746	1.597	1.000	-3.330	8.823
	10	5.100	2.204	1.000	-3.286	13.486
8	1	2.178	3.146	1.000	-9.790	14.147
	2	2.860	3.299	1.000	-9.691	15.412
	3	-1.173	2.856	1.000	-12.039	9.692
	4	.869	2.577	1.000	-8.936	10.675
	5	-1.244	1.721	1.000	-7.790	5.303
	6	.172	2.059	1.000	-7.660	8.005
	7	-1.328	1.918	1.000	-8.625	5.969
	9	1.418	1.607	1.000	-4.694	7.531
	10	3.772	2.593	1.000	-6.093	13.637
9	1	.760	3.037	1.000	-10.792	12.313
	2	1.442	3.281	1.000	-11.038	13.923
	3	-2.592	2.864	1.000	-13.486	8.303
	4	-.549	2.410	1.000	-9.718	8.620
	5	-2.662	1.903	1.000	-9.902	4.578
	6	-1.246	2.087	1.000	-9.186	6.694
	7	-2.746	1.597	1.000	-8.823	3.330
	8	-1.418	1.607	1.000	-7.531	4.694
	10	2.354	2.634	1.000	-7.669	12.377

Pairwise Comparisons

Measure: brainwavescores

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
10	1	-1.594	2.574	1.000	-11.387	8.200
	2	-.912	2.989	1.000	-12.282	10.458
	3	-4.946	2.649	1.000	-15.024	5.133
	4	-2.903	2.573	1.000	-12.693	6.887
	5	-5.016	2.154	1.000	-13.212	3.179
	6	-3.600	2.220	1.000	-12.046	4.846
	7	-5.100	2.204	1.000	-13.486	3.286
	8	-3.772	2.593	1.000	-13.637	6.093
	9	-2.354	2.634	1.000	-12.377	7.669

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.500	1.336[a]	9.000	12.000	.314	.500
Wilks' lambda	.500	1.336[a]	9.000	12.000	.314	.500
Hotelling's trace	1.002	1.336[a]	9.000	12.000	.314	.500
Roy's largest root	1.002	1.336[a]	9.000	12.000	.314	.500

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	12.024	.383
Wilks' lambda	12.024	.383
Hotelling's trace	12.024	.383
Roy's largest root	12.024	.383

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

a. Exact statistic

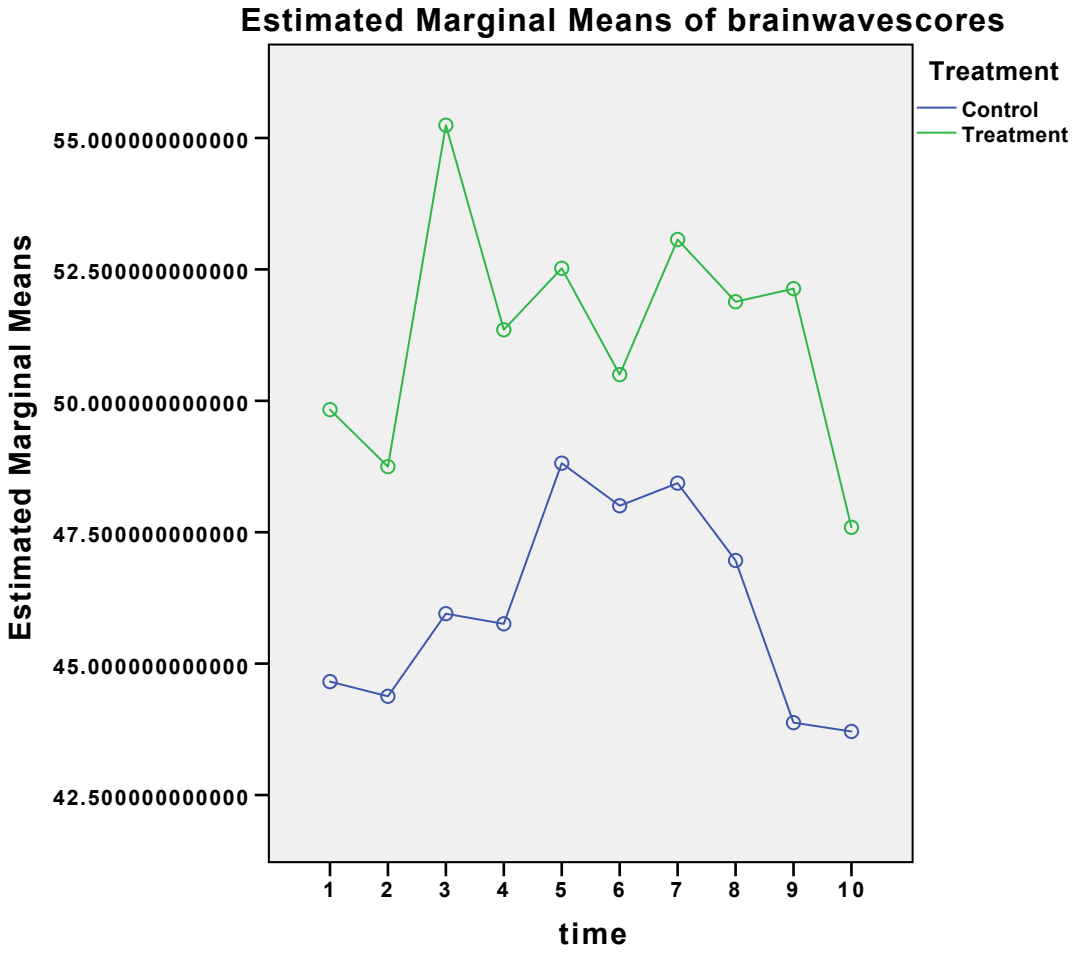
b. Computed using alpha = .05

4. Treatment * time

Measure: brainwavescores

Treatment	time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Control	1	44.658	3.082	38.229	51.086
	2	44.378	3.513	37.050	51.707
	3	45.950	3.749	38.131	53.769
	4	45.757	3.528	38.398	53.115
	5	48.813	3.094	42.360	55.267
	6	48.003	2.931	41.889	54.118
	7	48.433	3.320	41.507	55.360
	8	46.962	3.737	39.165	54.758
	9	43.877	3.663	36.235	51.518
	10	43.709	3.474	36.462	50.957
Treatment	1	49.832	2.813	43.964	55.700
	2	48.747	3.207	42.057	55.437
	3	55.243	3.422	48.105	62.381
	4	51.351	3.220	44.634	58.069
	5	52.521	2.824	46.630	58.412
	6	50.499	2.676	44.917	56.081
	7	53.069	3.031	46.747	59.392
	8	51.885	3.412	44.768	59.002
	9	52.133	3.344	45.158	59.109
	10	47.593	3.172	40.977	54.209

Profile Plots

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  /MEASURE=attentionselfreport
  /CONTRAST(Treatment)=Simple
  /METHOD=SSTYPE(3)
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/PLOT=PROFILE(time*Treatment)
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/EMMEANS=TABLES(Treatment) COMPARE ADJ(BONFERRONI)
/EMMEANS=TABLES(time) COMPARE ADJ(BONFERRONI)
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General Linear Model

Notes

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	Cases Used	**Statistics are based on all cases with valid data for all variables in the model.**

Notes

Syntax		GLM Survey1 Survey2 Survey3 BY Treatment /WSFACTOR=time 3 Simple /MEASURE=attentionselfreport /CONTRAST (Treatment)=Simple /METHOD=SSTYPE(3) /POSTHOC=Treatment (TUKEY) /PLOT=PROFILE (time*Treatment) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Treatment) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (time) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Treatment*time) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=time /DESIGN=Treatment.
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[DataSet3]

Warnings

Post hoc tests are not performed for Treatment because there are fewer than three groups.

Within-Subjects Factors

Measure: attentionselfreport

time	Dependent Variable
1	Survey1
2	Survey2
3	Survey3

Between-Subjects Factors

		N
Treatment	control	10
	treatment	12

Descriptive Statistics

	Treatment	Mean	Std. Deviation	N
Survey 1	control	4.70	2.359	10
	treatment	5.33	2.774	12
	Total	5.05	2.554	22
Survey 2	control	5.80	2.348	10
	treatment	6.42	2.503	12
	Total	6.14	2.396	22
Survey 3	control	4.00	2.261	10
	treatment	4.33	2.807	12
	Total	4.18	2.519	22

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

Box's M	4.162
F	.578
df1	6
df2	2613.311
Sig.	.748

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

a. Design: Intercept + Treatment
Within Subjects Design: time

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
time	Pillai's Trace	.313	4.322[b]	2.000	19.000	.028
	Wilks' Lambda	.687	4.322[b]	2.000	19.000	.028
	Hotelling's Trace	.455	4.322[b]	2.000	19.000	.028
	Roy's Largest Root	.455	4.322[b]	2.000	19.000	.028
time * Treatment	Pillai's Trace	.004	.035[b]	2.000	19.000	.965
	Wilks' Lambda	.996	.035[b]	2.000	19.000	.965
	Hotelling's Trace	.004	.035[b]	2.000	19.000	.965
	Roy's Largest Root	.004	.035[b]	2.000	19.000	.965

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
time	Pillai's Trace	.313	8.644	.679
	Wilks' Lambda	.313	8.644	.679
	Hotelling's Trace	.313	8.644	.679
	Roy's Largest Root	.313	8.644	.679
time * Treatment	Pillai's Trace	.004	.071	.055
	Wilks' Lambda	.004	.071	.055
	Hotelling's Trace	.004	.071	.055
	Roy's Largest Root	.004	.071	.055

a. Design: Intercept + Treatment
Within Subjects Design: time

b. Exact statistic

c. Computed using alpha = .05

Mauchly's Test of Sphericity[a]

Measure: attentionselfreport

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser
time	.898	2.044	2	.360	.907

Mauchly's Test of Sphericity[a]

Measure: attentionselfreport

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
time	1.000	.500

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

a. Design: Intercept + Treatment
Within Subjects Design: time

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: attentionselfreport

Source		Type III Sum of Squares	df	Mean Square	F
time	Sphericity Assumed	41.340	2	20.670	3.424
	Greenhouse-Geisser	41.340	1.815	22.779	3.424
	Huynh-Feldt	41.340	2.000	20.670	3.424
	Lower-bound	41.340	1.000	41.340	3.424
time * Treatment	Sphericity Assumed	.310	2	.155	.026
	Greenhouse-Geisser	.310	1.815	.171	.026
	Huynh-Feldt	.310	2.000	.155	.026
	Lower-bound	.310	1.000	.310	.026
Error(time)	Sphericity Assumed	241.478	40	6.037	
	Greenhouse-Geisser	241.478	36.297	6.653	
	Huynh-Feldt	241.478	40.000	6.037	
	Lower-bound	241.478	20.000	12.074	

Tests of Within-Subjects Effects

Measure: attentionselfreport

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Sphericity Assumed	.042	.146	6.848	.610
	Greenhouse-Geisser	.048	.146	6.214	.580
	Huynh-Feldt	.042	.146	6.848	.610
	Lower-bound	.079	.146	3.424	.421
time * Treatment	Sphericity Assumed	.975	.001	.051	.054
	Greenhouse-Geisser	.966	.001	.047	.053
	Huynh-Feldt	.975	.001	.051	.054
	Lower-bound	.874	.001	.026	.053
Error(time)	Sphericity Assumed				
	Greenhouse-Geisser				
	Huynh-Feldt				
	Lower-bound				

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: attentionselfreport

Source	time	Type III Sum of Squares	df	Mean Square	F
time	Level 1 vs. Level 3	15.764	1	15.764	1.420
	Level 2 vs. Level 3	82.256	1	82.256	8.820
time * Treatment	Level 1 vs. Level 3	.491	1	.491	.044
	Level 2 vs. Level 3	.438	1	.438	.047
Error(time)	Level 1 vs. Level 3	222.100	20	11.105	
	Level 2 vs. Level 3	186.517	20	9.326	

Tests of Within-Subjects Contrasts

Measure: attentionselfreport

Source	time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
time	Level 1 vs. Level 3	.247	.066	1.420	.206
	Level 2 vs. Level 3	.008	.306	8.820	.806
time * Treatment	Level 1 vs. Level 3	.836	.002	.044	.055
	Level 2 vs. Level 3	.831	.002	.047	.055
Error(time)	Level 1 vs. Level 3				
	Level 2 vs. Level 3				

a. Computed using alpha = .05

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

	F	df1	df2	Sig.
Survey 1	.638	1	20	.434
Survey 2	.544	1	20	.469
Survey 3	.226	1	20	.640

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

a. Design: Intercept + Treatment
Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: attentionselfreport

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	566.873	1	566.873	235.425	.000	.922
Treatment	1.519	1	1.519	.631	.436	.031
Error	48.157	20	2.408			

Tests of Between-Subjects Effects

Measure: attentionselfreport

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	235.425	1.000
Treatment	.631	.118
Error		

a. Computed using alpha = .05

Custom Hypothesis Tests

Contrast Results (K Matrix)

Treatment Simple Contrast[a]			Averaged Variable attentionselfreport
Level 1 vs. Level 2	Contrast Estimate		-.528
	Hypothesized Value		0
	Difference (Estimate - Hypothesized)		-.528
	Std. Error		.664
	Sig.		.436
	95% Confidence Interval for Difference	Lower Bound	-1.914
		Upper Bound	.858

a. Reference category = 2

Test Results

Measure: attentionselfreport

Transformed Variable: AVERAGE

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	1.519	1	1.519	.631	.436	.031
Error	48.157	20	2.408			

Test Results

Measure: attentionselfreport

Transformed Variable: AVERAGE

Source	Noncent. Parameter	Observed Power[a]
Contrast	.631	.118
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: attentionselfreport

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
5.097	.332	4.404	5.790

2. Treatment

Estimates

Measure: attentionselfreport

Treatment	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
control	4.833	.491	3.810	5.857
treatment	5.361	.448	4.427	6.296

Pairwise Comparisons

Measure: attentionselfreport

(I) Treatment	(J) Treatment	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
control	treatment	-.528	.664	.436	-1.914	.858
treatment	control	.528	.664	.436	-.858	1.914

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Measure: attentionselfreport

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	1.519	1	1.519	.631	.436	.031
Error	48.157	20	2.408			

Univariate Tests

Measure: attentionselfreport

	Noncent. Parameter	Observed Power[a]
Contrast	.631	.118
Error		

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

a. Computed using alpha = .05

3. time

Estimates

Measure: attentionselfreport

time	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	5.017	.556	3.857	6.176
2	6.108	.521	5.021	7.195
3	4.167	.551	3.016	5.317

Pairwise Comparisons

Measure: attentionselfreport

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	-1.092	.851	.642	-3.314	1.131
	3	.850	.713	.742	-1.014	2.714
2	1	1.092	.851	.642	-1.131	3.314
	3	1.942*	.654	.023	.234	3.650
3	1	-.850	.713	.742	-2.714	1.014
	2	-1.942*	.654	.023	-3.650	-.234

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.	Partial Eta Squared
Pillai's trace	.313	4.322[a]	2.000	19.000	.028	.313
Wilks' lambda	.687	4.322[a]	2.000	19.000	.028	.313
Hotelling's trace	.455	4.322[a]	2.000	19.000	.028	.313
Roy's largest root	.455	4.322[a]	2.000	19.000	.028	.313

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	8.644	.679
Wilks' lambda	8.644	.679
Hotelling's trace	8.644	.679
Roy's largest root	8.644	.679

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

a. Exact statistic

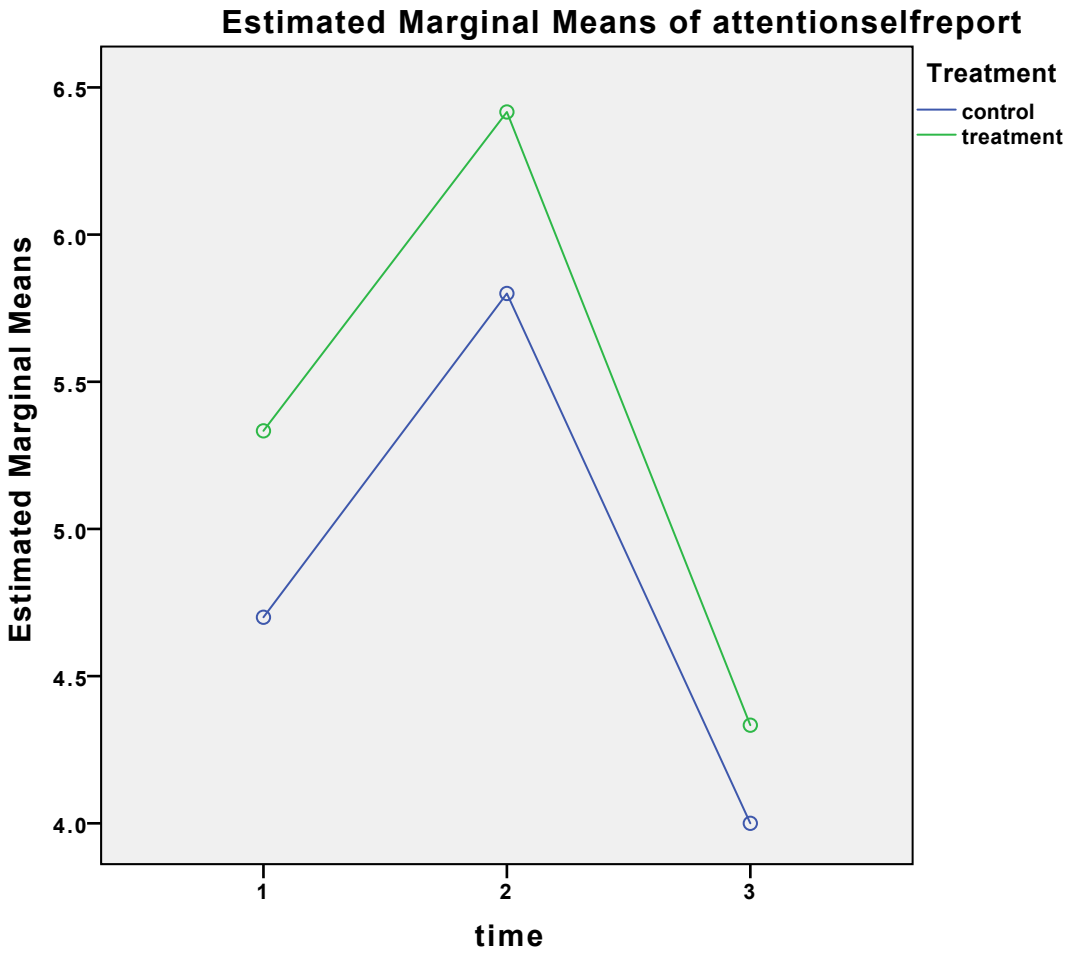
b. Computed using alpha = .05

4. Treatment * time

Measure: attentionselfreport

Treatment	time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
control	1	4.700	.821	2.988	6.412
	2	5.800	.770	4.194	7.406
	3	4.000	.814	2.301	5.699
treatment	1	5.333	.749	3.770	6.896
	2	6.417	.703	4.951	7.883
	3	4.333	.743	2.782	5.884

Profile Plots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Estimated Marginal Means
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6.0
5.5
5.0
4.5
4.0
1
2
3
time
Treatment
control
treatment