

## Items Observed

[DataSet1] D:\Acads\mtp\Data\_Analysis\Anova analysis\Complete Data.sav

## Warnings

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

## Within-Subjects Factors

Measure: MEASURE\_1

Time	Dependent Variable
1	ItemsObservedBeforeEarthquake
2	ItemsObservedDuringEarthquake
3	ItemsObservedAfterEarthquake

## Between-Subjects Factors

		N
Information	Given	18
	Not Given	16

## Descriptive Statistics

	Information	Mean	Std. Deviation	N
ItemsObservedBeforeEarthquake	Given	2.611	2.0332	18
	Not Given	2.750	2.1448	16
	Total	2.676	2.0556	34
ItemsObservedDuringEarthquake	Given	.667	1.0290	18
	Not Given	1.500	1.8974	16
	Total	1.059	1.5363	34
ItemsObservedAfterEarthquake	Given	4.444	3.9589	18
	Not Given	3.563	2.5812	16
	Total	4.029	3.3619	34

### Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	16.276
F	2.433
df1	6
df2	7119.187
Sig.	.024

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

a. Design: Intercept + Information  
Within Subjects Design: Time

### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.
Time	Pillai's Trace	.504	15.755 <sup>b</sup>	2.000	31.000	.000
	Wilks' Lambda	.496	15.755 <sup>b</sup>	2.000	31.000	.000
	Hotelling's Trace	1.016	15.755 <sup>b</sup>	2.000	31.000	.000
	Roy's Largest Root	1.016	15.755 <sup>b</sup>	2.000	31.000	.000
Time * Information	Pillai's Trace	.075	1.254 <sup>b</sup>	2.000	31.000	.299
	Wilks' Lambda	.925	1.254 <sup>b</sup>	2.000	31.000	.299
	Hotelling's Trace	.081	1.254 <sup>b</sup>	2.000	31.000	.299
	Roy's Largest Root	.081	1.254 <sup>b</sup>	2.000	31.000	.299

### Multivariate Tests<sup>a</sup>

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power <sup>c</sup>
Time	Pillai's Trace	.504	31.509	.999
	Wilks' Lambda	.504	31.509	.999
	Hotelling's Trace	.504	31.509	.999
	Roy's Largest Root	.504	31.509	.999
Time * Information	Pillai's Trace	.075	2.508	.252
	Wilks' Lambda	.075	2.508	.252
	Hotelling's Trace	.075	2.508	.252
	Roy's Largest Root	.075	2.508	.252

a. Design: Intercept + Information  
Within Subjects Design: Time

b. Exact statistic

c. Computed using alpha = .05

### Mauchly's Test of Sphericity<sup>a</sup>

Measure: MEASURE\_1

		Approx. Chi-Square	df	Sig.	Epsilon <sup>b</sup> Greenhouse-Geisser
Within Subjects Effect	Mauchly's W				
Time	.742	9.243	2	.010	.795

### Mauchly's Test of Sphericity<sup>a</sup>

Measure: MEASURE\_1

		Epsilon <sup>b</sup>
Within Subjects Effect	Huynh-Feldt	Lower-bound
Time	.856	.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 + Information  
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	144.886	2	72.443	22.257
	Greenhouse-Geisser	144.886	1.590	91.120	22.257
	Huynh-Feldt	144.886	1.712	84.630	22.257
	Lower-bound	144.886	1.000	144.886	22.257
Time * Information	Sphericity Assumed	12.611	2	6.306	1.937
	Greenhouse-Geisser	12.611	1.590	7.931	1.937
	Huynh-Feldt	12.611	1.712	7.366	1.937
	Lower-bound	12.611	1.000	12.611	1.937
Error(Time)	Sphericity Assumed	208.310	64	3.255	
	Greenhouse-Geisser	208.310	50.882	4.094	
	Huynh-Feldt	208.310	54.784	3.802	
	Lower-bound	208.310	32.000	6.510	

### Tests of Within-Subjects Effects

Measure: MEASURE\_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>
Time	Sphericity Assumed	.000	.410	44.514	1.000
	Greenhouse-Geisser	.000	.410	35.390	1.000
	Huynh-Feldt	.000	.410	38.104	1.000
	Lower-bound	.000	.410	22.257	.996
Time * Information	Sphericity Assumed	.152	.057	3.875	.387
	Greenhouse-Geisser	.162	.057	3.080	.342
	Huynh-Feldt	.159	.057	3.317	.356
	Lower-bound	.174	.057	1.937	.271
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	Sig.
Time	Linear	29.649	1	29.649	10.043	.003
	Quadratic	115.237	1	115.237	32.392	.000
Time * Information	Linear	4.414	1	4.414	1.495	.230
	Quadratic	8.198	1	8.198	2.304	.139
Error(Time)	Linear	94.469	32	2.952		
	Quadratic	113.841	32	3.558		

### Tests of Within-Subjects Contrasts

Measure: MEASURE\_1

Source	Time	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>
Time	Linear	.239	10.043	.867
	Quadratic	.503	32.392	1.000
Time * Information	Linear	.045	1.495	.220
	Quadratic	.067	2.304	.313
Error(Time)	Linear			
	Quadratic			

a. Computed using alpha = .05

### Levene's Test of Equality of Error Variances<sup>a</sup>

		Levene Statistic	df1	df2	Sig.
ItemsObservedBeforeEarthquake	Based on Mean	.508	1	32	.481
	Based on Median	.259	1	32	.615
	Based on Median and with adjusted df	.259	1	31.913	.615
	Based on trimmed mean	.491	1	32	.488
ItemsObservedDuringEarthquake	Based on Mean	5.982	1	32	.020
	Based on Median	2.973	1	32	.094
	Based on Median and with adjusted df	2.973	1	29.733	.095
	Based on trimmed mean	4.973	1	32	.033
ItemsObservedAfterEarthquake	Based on Mean	1.029	1	32	.318
	Based on Median	.559	1	32	.460
	Based on Median and with adjusted df	.559	1	24.700	.462
	Based on trimmed mean	.650	1	32	.426

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

a. Design: Intercept + Information  
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	681.396	1	681.396	59.035	.000	.648
Information	.023	1	.023	.002	.965	.000
Error	369.350	32	11.542			

### Tests of Between-Subjects Effects

Measure: MEASURE\_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power <sup>a</sup>
Intercept	59.035	1.000
Information	.002	.050
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
2.589	.337	1.903	3.276

### 2. Information

#### Estimates

Measure: MEASURE\_1

Information	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Given	2.574	.462	1.632	3.516
Not Given	2.604	.490	1.605	3.603

### Pairwise Comparisons

Measure: MEASURE\_1

(I) Information	(J) Information	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
Given	Not Given	-.030	.674	.965	-1.403	1.343
Not Given	Given	.030	.674	.965	-1.343	1.403

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	.008	1	.008	.002	.965	.000
Error	123.117	32	3.847			

## Univariate Tests

Measure: MEASURE\_1

	Noncent. Parameter	Observed Power <sup>a</sup>
Contrast	.002	.050
Error		

The F tests the effect of Information. 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

Time	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	2.681	.358	1.950	3.411
2	1.083	.258	.558	1.608
3	4.003	.581	2.819	5.188

### Pairwise Comparisons

Measure: MEASURE\_1

(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	1.597 <sup>*</sup>	.344	.000	.729	2.465
	3	-1.323 <sup>*</sup>	.417	.010	-2.378	-.268
2	1	-1.597 <sup>*</sup>	.344	.000	-2.465	-.729
	3	-2.920 <sup>*</sup>	.533	.000	-4.267	-1.573
3	1	1.323 <sup>*</sup>	.417	.010	.268	2.378
	2	2.920 <sup>*</sup>	.533	.000	1.573	4.267

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	.504	15.755 <sup>a</sup>	2.000	31.000	.000	.504
Wilks' lambda	.496	15.755 <sup>a</sup>	2.000	31.000	.000	.504
Hotelling's trace	1.016	15.755 <sup>a</sup>	2.000	31.000	.000	.504
Roy's largest root	1.016	15.755 <sup>a</sup>	2.000	31.000	.000	.504

### Multivariate Tests

	Noncent. Parameter	Observed Power <sup>b</sup>
Pillai's trace	31.509	.999
Wilks' lambda	31.509	.999
Hotelling's trace	31.509	.999
Roy's largest root	31.509	.999

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. Information \* Time

Measure: MEASURE\_1

Information	Time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Given	1	2.611	.492	1.609	3.613
	2	.667	.354	-.053	1.387
	3	4.444	.798	2.820	6.069
Not Given	1	2.750	.522	1.688	3.812
	2	1.500	.375	.736	2.264
	3	3.563	.846	1.839	5.286

### Profile Plots



