

General Linear Model

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 | 40 |
| | Not Given | 40 |

Descriptive Statistics

| | Information | Mean | Std. Deviation | N |
|-------------------------------|-------------|-------|----------------|----|
| ItemsObservedBeforeEarthquake | Given | 1.050 | 1.7824 | 40 |
| | Not Given | 1.350 | 2.0198 | 40 |
| | Total | 1.200 | 1.8987 | 80 |
| ItemsObservedDuringEarthquake | Given | .275 | .7506 | 40 |
| | Not Given | .700 | 1.3996 | 40 |
| | Total | .488 | 1.1362 | 80 |
| ItemsObservedAfterEarthquake | Given | 1.900 | 3.4403 | 40 |
| | Not Given | 1.650 | 2.4552 | 40 |
| | Total | 1.775 | 2.9723 | 80 |

Box's Test of Equality of Covariance Matrices^a

| | |
|---------|-----------|
| Box's M | 48.862 |
| F | 7.803 |
| df1 | 6 |
| df2 | 44080.302 |
| Sig. | .000 |

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^a

| Effect | | Value | F | Hypothesis df | Error df | Sig. |
|--------------------|--------------------|-------|---------------------|---------------|----------|------|
| Time | Pillai's Trace | .219 | 10.771 ^b | 2.000 | 77.000 | .000 |
| | Wilks' Lambda | .781 | 10.771 ^b | 2.000 | 77.000 | .000 |
| | Hotelling's Trace | .280 | 10.771 ^b | 2.000 | 77.000 | .000 |
| | Roy's Largest Root | .280 | 10.771 ^b | 2.000 | 77.000 | .000 |
| Time * Information | Pillai's Trace | .026 | 1.017 ^b | 2.000 | 77.000 | .366 |
| | Wilks' Lambda | .974 | 1.017 ^b | 2.000 | 77.000 | .366 |
| | Hotelling's Trace | .026 | 1.017 ^b | 2.000 | 77.000 | .366 |
| | Roy's Largest Root | .026 | 1.017 ^b | 2.000 | 77.000 | .366 |

Multivariate Tests^a

| Effect | | Partial Eta Squared | Noncent. Parameter | Observed Power ^c |
|--------------------|--------------------|---------------------|--------------------|-----------------------------|
| Time | Pillai's Trace | .219 | 21.542 | .988 |
| | Wilks' Lambda | .219 | 21.542 | .988 |
| | Hotelling's Trace | .219 | 21.542 | .988 |
| | Roy's Largest Root | .219 | 21.542 | .988 |
| Time * Information | Pillai's Trace | .026 | 2.034 | .221 |
| | Wilks' Lambda | .026 | 2.034 | .221 |
| | Hotelling's Trace | .026 | 2.034 | .221 |
| | Roy's Largest Root | .026 | 2.034 | .221 |

a. Design: Intercept + Information
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 | .583 | 41.493 | 2 | .000 | .706 |

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

| Within Subjects Effect | Epsilon ^b | |
|------------------------|----------------------|-------------|
| | Huynh-Feldt | Lower-bound |
| Time | .724 | .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 | 66.558 | 2 | 33.279 | 16.987 |
| | Greenhouse-Geisser | 66.558 | 1.412 | 47.143 | 16.987 |
| | Huynh-Feldt | 66.558 | 1.449 | 45.946 | 16.987 |
| | Lower-bound | 66.558 | 1.000 | 66.558 | 16.987 |
| Time * Information | Sphericity Assumed | 5.158 | 2 | 2.579 | 1.317 |
| | Greenhouse-Geisser | 5.158 | 1.412 | 3.654 | 1.317 |
| | Huynh-Feldt | 5.158 | 1.449 | 3.561 | 1.317 |
| | Lower-bound | 5.158 | 1.000 | 5.158 | 1.317 |
| Error(Time) | Sphericity Assumed | 305.617 | 156 | 1.959 | |
| | Greenhouse-Geisser | 305.617 | 110.123 | 2.775 | |
| | Huynh-Feldt | 305.617 | 112.992 | 2.705 | |
| | Lower-bound | 305.617 | 78.000 | 3.918 | |

Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Sig. | Partial Eta Squared | Noncent. Parameter | Observed Power ^a |
|--------------------|--------------------|------|---------------------|--------------------|-----------------------------|
| Time | Sphericity Assumed | .000 | .179 | 33.974 | 1.000 |
| | Greenhouse-Geisser | .000 | .179 | 23.983 | .997 |
| | Huynh-Feldt | .000 | .179 | 24.608 | .997 |
| | Lower-bound | .000 | .179 | 16.987 | .983 |
| Time * Information | Sphericity Assumed | .271 | .017 | 2.633 | .281 |
| | Greenhouse-Geisser | .266 | .017 | 1.859 | .238 |
| | Huynh-Feldt | .266 | .017 | 1.907 | .241 |
| | Lower-bound | .255 | .017 | 1.317 | .205 |
| 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 | 13.225 | 1 | 13.225 | 8.990 | .004 |
| | Quadratic | 53.333 | 1 | 53.333 | 21.795 | .000 |
| Time * Information | Linear | 3.025 | 1 | 3.025 | 2.056 | .156 |
| | Quadratic | 2.133 | 1 | 2.133 | .872 | .353 |
| Error(Time) | Linear | 114.750 | 78 | 1.471 | | |
| | Quadratic | 190.867 | 78 | 2.447 | | |

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | Time | Partial Eta Squared | Noncent. Parameter | Observed Power ^a |
|--------------------|-----------|---------------------|--------------------|-----------------------------|
| Time | Linear | .103 | 8.990 | .842 |
| | Quadratic | .218 | 21.795 | .996 |
| Time * Information | Linear | .026 | 2.056 | .294 |
| | Quadratic | .011 | .872 | .152 |
| Error(Time) | Linear | | | |
| | Quadratic | | | |

a. Computed using alpha = .05

Levene's Test of Equality of Error Variances^a

| | | Levene Statistic | df1 | df2 | Sig. |
|-------------------------------|--------------------------------------|------------------|-----|--------|------|
| ItemsObservedBeforeEarthquake | Based on Mean | 1.133 | 1 | 78 | .290 |
| | Based on Median | .496 | 1 | 78 | .483 |
| | Based on Median and with adjusted df | .496 | 1 | 76.812 | .483 |
| | Based on trimmed mean | .879 | 1 | 78 | .351 |
| ItemsObservedDuringEarthquake | Based on Mean | 8.353 | 1 | 78 | .005 |
| | Based on Median | 2.864 | 1 | 78 | .095 |
| | Based on Median and with adjusted df | 2.864 | 1 | 59.721 | .096 |
| | Based on trimmed mean | 6.657 | 1 | 78 | .012 |
| ItemsObservedAfterEarthquake | Based on Mean | .768 | 1 | 78 | .384 |
| | Based on Median | .140 | 1 | 78 | .709 |
| | Based on Median and with adjusted df | .140 | 1 | 70.544 | .709 |
| | Based on trimmed mean | .298 | 1 | 78 | .587 |

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 | 319.704 | 1 | 319.704 | 32.283 | .000 | .293 |
| Information | 1.504 | 1 | 1.504 | .152 | .698 | .002 |
| Error | 772.458 | 78 | 9.903 | | | |

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

| Source | Noncent. Parameter | Observed Power ^a |
|-------------|--------------------|-----------------------------|
| Intercept | 32.283 | 1.000 |
| Information | .152 | .067 |
| 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 |
| 1.154 | .203 | .750 | 1.559 |

2. Information

Estimates

Measure: MEASURE_1

| Information | Mean | Std. Error | 95% Confidence Interval | |
|-------------|-------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| Given | 1.075 | .287 | .503 | 1.647 |
| Not Given | 1.233 | .287 | .661 | 1.805 |

Pairwise Comparisons

Measure: MEASURE_1

| (I) Information | (J) Information | Mean Difference (I-J) | Std. Error | Sig. ^a | 95% Confidence Interval for Difference ^a | |
|-----------------|-----------------|-----------------------|------------|-------------------|---|-------------|
| | | | | | Lower Bound | Upper Bound |
| Given | Not Given | -.158 | .406 | .698 | -.967 | .650 |
| Not Given | Given | .158 | .406 | .698 | -.650 | .967 |

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 | .501 | 1 | .501 | .152 | .698 | .002 |
| Error | 257.486 | 78 | 3.301 | | | |

Univariate Tests

Measure: MEASURE_1

| | Noncent. Parameter | Observed Power ^a |
|----------|-----------------------|--------------------------------|
| Contrast | .152 | .067 |
| 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 | 1.200 | .213 | .776 | 1.624 |
| 2 | .488 | .126 | .238 | .737 |
| 3 | 1.775 | .334 | 1.110 | 2.440 |

Pairwise Comparisons

Measure: MEASURE_1

| (I) Time | (J) Time | Mean Difference (I-J) | Std. Error | Sig. ^b | 95% Confidence Interval for Difference ^b | |
|----------|----------|--------------------------|------------|-------------------|--|-------------|
| | | | | | Lower Bound | Upper Bound |
| 1 | 2 | .713 [*] | .173 | .000 | .290 | 1.135 |
| | 3 | -.575 [*] | .192 | .011 | -1.044 | -.106 |
| 2 | 1 | -.713 [*] | .173 | .000 | -1.135 | -.290 |
| | 3 | -1.287 [*] | .283 | .000 | -1.981 | -.594 |
| 3 | 1 | .575 [*] | .192 | .011 | .106 | 1.044 |
| | 2 | 1.288 [*] | .283 | .000 | .594 | 1.981 |

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 | .219 | 10.771 ^a | 2.000 | 77.000 | .000 | .219 |
| Wilks' lambda | .781 | 10.771 ^a | 2.000 | 77.000 | .000 | .219 |
| Hotelling's trace | .280 | 10.771 ^a | 2.000 | 77.000 | .000 | .219 |
| Roy's largest root | .280 | 10.771 ^a | 2.000 | 77.000 | .000 | .219 |

Multivariate Tests

| | Noncent. Parameter | Observed Power ^b |
|--------------------|-----------------------|--------------------------------|
| Pillai's trace | 21.542 | .988 |
| Wilks' lambda | 21.542 | .988 |
| Hotelling's trace | 21.542 | .988 |
| Roy's largest root | 21.542 | .988 |

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 | 1.050 | .301 | .450 | 1.650 |
| | 2 | .275 | .178 | -.079 | .629 |
| | 3 | 1.900 | .473 | .959 | 2.841 |
| Not Given | 1 | 1.350 | .301 | .750 | 1.950 |
| | 2 | .700 | .178 | .346 | 1.054 |
| | 3 | 1.650 | .473 | .709 | 2.591 |

Profile Plots



