## General Linear Model

### 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 Task because there are fewer than three groups. |
| 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 | TimeNearCornerBeforeEarthquake |
| 2 | TimeNearCornerDuringEarthquake |
| 3 | TimeNearCornerAfterEarthquake |

### Between-Subjects Factors

| | | N |
|---|---|---|
| Task | Book Task | 40 |
| | No Task | 40 |
| Information | Given | 40 |
| | Not Given | 40 |

## Descriptive Statistics

| | Task | Information | Mean | Std. Deviation | N |
|---|---|---|---|---|---|
| TimeNearCornerBeforeEarthquake | Book Task | Given | .24705 | 1.104841 | 20 |
| | | Not Given | .00000 | .000000 | 20 |
| | | Total | .12352 | .781241 | 40 |
| | No Task | Given | .00000 | .000000 | 20 |
| | | Not Given | .00000 | .000000 | 20 |
| | | Total | .00000 | .000000 | 40 |
| | Total | Given | .12352 | .781241 | 40 |
| | | Not Given | .00000 | .000000 | 40 |
| | | Total | .06176 | .552421 | 80 |
| TimeNearCornerDuringEarthquake | Book Task | Given | .05500 | .245967 | 20 |
| | | Not Given | .11965 | .517025 | 20 |
| | | Total | .08733 | .400969 | 40 |
| | No Task | Given | 4.58770 | 11.751172 | 20 |
| | | Not Given | .05435 | .216069 | 20 |
| | | Total | 2.32103 | 8.518623 | 40 |
| | Total | Given | 2.32135 | 8.518929 | 40 |
| | | Not Given | .08700 | .392515 | 40 |
| | | Total | 1.20417 | 6.096450 | 80 |
| TimeNearCornerAfterEarthquake | Book Task | Given | .00000 | .000000 | 20 |
| | | Not Given | .00000 | .000000 | 20 |
| | | Total | .00000 | .000000 | 40 |
| | No Task | Given | .78185 | 1.731644 | 20 |
| | | Not Given | .01510 | .067529 | 20 |
| | | Total | .39847 | 1.270361 | 40 |
| | Total | Given | .39093 | 1.271846 | 40 |
| | | Not Given | .00755 | .047750 | 40 |
| | | Total | .19924 | .914819 | 80 |

## Multivariate Tests[a]

| Effect | | Value | F | Hypothesis df | Error df |
|---|---|---|---|---|---|
| Time | Pillai's Trace | .051 | 2.028[b] | 2.000 | 75.000 |
| | Wilks' Lambda | .949 | 2.028[b] | 2.000 | 75.000 |
| | Hotelling's Trace | .054 | 2.028[b] | 2.000 | 75.000 |
| | Roy's Largest Root | .054 | 2.028[b] | 2.000 | 75.000 |
| Time * Task | Pillai's Trace | .092 | 3.809[b] | 2.000 | 75.000 |
| | Wilks' Lambda | .908 | 3.809[b] | 2.000 | 75.000 |
| | Hotelling's Trace | .102 | 3.809[b] | 2.000 | 75.000 |
| | Roy's Largest Root | .102 | 3.809[b] | 2.000 | 75.000 |
| Time * Information | Pillai's Trace | .045 | 1.756[b] | 2.000 | 75.000 |
| | Wilks' Lambda | .955 | 1.756[b] | 2.000 | 75.000 |
| | Hotelling's Trace | .047 | 1.756[b] | 2.000 | 75.000 |
| | Roy's Largest Root | .047 | 1.756[b] | 2.000 | 75.000 |
| Time * Task * Information | Pillai's Trace | .091 | 3.753[b] | 2.000 | 75.000 |
| | Wilks' Lambda | .909 | 3.753[b] | 2.000 | 75.000 |
| | Hotelling's Trace | .100 | 3.753[b] | 2.000 | 75.000 |
| | Roy's Largest Root | .100 | 3.753[b] | 2.000 | 75.000 |

**Multivariate Tests[a]**

| Effect | | Sig. | Partial Eta Squared | Noncent. Parameter |
|---|---|---|---|---|
| Time | Pillai's Trace | .139 | .051 | 4.056 |
| | Wilks' Lambda | .139 | .051 | 4.056 |
| | Hotelling's Trace | .139 | .051 | 4.056 |
| | Roy's Largest Root | .139 | .051 | 4.056 |
| Time * Task | Pillai's Trace | .027 | .092 | 7.618 |
| | Wilks' Lambda | .027 | .092 | 7.618 |
| | Hotelling's Trace | .027 | .092 | 7.618 |
| | Roy's Largest Root | .027 | .092 | 7.618 |
| Time * Information | Pillai's Trace | .180 | .045 | 3.511 |
| | Wilks' Lambda | .180 | .045 | 3.511 |
| | Hotelling's Trace | .180 | .045 | 3.511 |
| | Roy's Largest Root | .180 | .045 | 3.511 |
| Time * Task * Information | Pillai's Trace | .028 | .091 | 7.505 |
| | Wilks' Lambda | .028 | .091 | 7.505 |
| | Hotelling's Trace | .028 | .091 | 7.505 |
| | Roy's Largest Root | .028 | .091 | 7.505 |

## Multivariate Tests[a]

| Effect | | Observed Power[c] |
|---|---|---|
| Time | Pillai's Trace | .406 |
| | Wilks' Lambda | .406 |
| | Hotelling's Trace | .406 |
| | Roy's Largest Root | .406 |
| Time * Task | Pillai's Trace | .676 |
| | Wilks' Lambda | .676 |
| | Hotelling's Trace | .676 |
| | Roy's Largest Root | .676 |
| Time * Information | Pillai's Trace | .357 |
| | Wilks' Lambda | .357 |
| | Hotelling's Trace | .357 |
| | Roy's Largest Root | .357 |
| Time * Task * Information | Pillai's Trace | .669 |
| | Wilks' Lambda | .669 |
| | Hotelling's Trace | .669 |
| | Roy's Largest Root | .669 |

a. Design: Intercept + Task + Information + Task * 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 | .088 | 182.565 | 2 | .000 | .523 |

## Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

| Within Subjects Effect | Epsilon[b] Huynh-Feldt | Lower-bound |
|---|---|---|
| Time | .545 | .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 + Task + Information + Task * 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 | 62.237 | 2 | 31.119 | 2.643 |
| | Greenhouse-Geisser | 62.237 | 1.046 | 59.509 | 2.643 |
| | Huynh-Feldt | 62.237 | 1.090 | 57.121 | 2.643 |
| | Lower-bound | 62.237 | 1.000 | 62.237 | 2.643 |
| Time * Task | Sphericity Assumed | 61.314 | 2 | 30.657 | 2.604 |
| | Greenhouse-Geisser | 61.314 | 1.046 | 58.626 | 2.604 |
| | Huynh-Feldt | 61.314 | 1.090 | 56.273 | 2.604 |
| | Lower-bound | 61.314 | 1.000 | 61.314 | 2.604 |
| Time * Information | Sphericity Assumed | 52.995 | 2 | 26.497 | 2.250 |
| | Greenhouse-Geisser | 52.995 | 1.046 | 50.672 | 2.250 |
| | Huynh-Feldt | 52.995 | 1.090 | 48.638 | 2.250 |
| | Lower-bound | 52.995 | 1.000 | 52.995 | 2.250 |
| Time * Task * Information | Sphericity Assumed | 65.301 | 2 | 32.651 | 2.773 |
| | Greenhouse-Geisser | 65.301 | 1.046 | 62.439 | 2.773 |
| | Huynh-Feldt | 65.301 | 1.090 | 59.933 | 2.773 |
| | Lower-bound | 65.301 | 1.000 | 65.301 | 2.773 |
| Error(Time) | Sphericity Assumed | 1789.783 | 152 | 11.775 | |
| | Greenhouse-Geisser | 1789.783 | 79.484 | 22.517 | |
| | Huynh-Feldt | 1789.783 | 82.807 | 21.614 | |
| | Lower-bound | 1789.783 | 76.000 | 23.550 | |

## Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Sig. | Partial Eta Squared | Noncent. Parameter |
|---|---|---|---|---|
| Time | Sphericity Assumed | .074 | .034 | 5.286 |
| | Greenhouse-Geisser | .107 | .034 | 2.764 |
| | Huynh-Feldt | .105 | .034 | 2.880 |
| | Lower-bound | .108 | .034 | 2.643 |
| Time * Task | Sphericity Assumed | .077 | .033 | 5.207 |
| | Greenhouse-Geisser | .109 | .033 | 2.723 |
| | Huynh-Feldt | .108 | .033 | 2.837 |
| | Lower-bound | .111 | .033 | 2.604 |
| Time * Information | Sphericity Assumed | .109 | .029 | 4.501 |
| | Greenhouse-Geisser | .137 | .029 | 2.353 |
| | Huynh-Feldt | .135 | .029 | 2.452 |
| | Lower-bound | .138 | .029 | 2.250 |
| Time * Task * Information | Sphericity Assumed | .066 | .035 | 5.546 |
| | Greenhouse-Geisser | .098 | .035 | 2.900 |
| | Huynh-Feldt | .097 | .035 | 3.021 |
| | Lower-bound | .100 | .035 | 2.773 |
| Error(Time) | Sphericity Assumed | | | |
| | Greenhouse-Geisser | | | |
| | Huynh-Feldt | | | |
| | Lower-bound | | | |

## Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Observed Power[a] |
|---|---|---|
| Time | Sphericity Assumed | .519 |
| | Greenhouse-Geisser | .370 |
| | Huynh-Feldt | .377 |
| | Lower-bound | .362 |
| Time * Task | Sphericity Assumed | .513 |
| | Greenhouse-Geisser | .365 |
| | Huynh-Feldt | .373 |
| | Lower-bound | .357 |
| Time * Information | Sphericity Assumed | .453 |
| | Greenhouse-Geisser | .323 |
| | Huynh-Feldt | .330 |
| | Lower-bound | .316 |
| Time * Task * Information | Sphericity Assumed | .540 |
| | Greenhouse-Geisser | .385 |
| | Huynh-Feldt | .393 |
| | Lower-bound | .376 |
| 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 | Linear | .756 | 1 | .756 | 1.432 |
| | Quadratic | 61.481 | 1 | 61.481 | 2.671 |
| Time * Task | Linear | 2.725 | 1 | 2.725 | 5.161 |
| | Quadratic | 58.589 | 1 | 58.589 | 2.545 |
| Time * Information | Linear | .675 | 1 | .675 | 1.279 |
| | Quadratic | 52.320 | 1 | 52.320 | 2.273 |
| Time * Task * Information | Linear | 2.569 | 1 | 2.569 | 4.867 |
| | Quadratic | 62.732 | 1 | 62.732 | 2.725 |
| Error(Time) | Linear | 40.126 | 76 | .528 | |
| | Quadratic | 1749.657 | 76 | 23.022 | |

## Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | Time | Sig. | Partial Eta Squared | Noncent. Parameter | Observed Power[a] |
|---|---|---|---|---|---|
| Time | Linear | .235 | .018 | 1.432 | .219 |
| | Quadratic | .106 | .034 | 2.671 | .365 |
| Time * Task | Linear | .026 | .064 | 5.161 | .611 |
| | Quadratic | .115 | .032 | 2.545 | .350 |
| Time * Information | Linear | .262 | .017 | 1.279 | .201 |
| | Quadratic | .136 | .029 | 2.273 | .319 |
| Time * Task * Information | Linear | .030 | .060 | 4.867 | .586 |
| | Quadratic | .103 | .035 | 2.725 | .371 |
| Error(Time) | Linear | | | | |
| | Quadratic | | | | |

a. Computed using alpha = .05

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

| | | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| TimeNearCornerBeforeEarthquake | Based on Mean | 4.457 | 3 | 76 | .006 |
| | Based on Median | 1.000 | 3 | 76 | .398 |
| | Based on Median and with adjusted df | 1.000 | 3 | 19.000 | .414 |
| | Based on trimmed mean | 1.000 | 3 | 76 | .398 |
| TimeNearCornerDuringEarthquake | Based on Mean | 12.434 | 3 | 76 | .000 |
| | Based on Median | 2.940 | 3 | 76 | .038 |
| | Based on Median and with adjusted df | 2.940 | 3 | 19.103 | .059 |
| | Based on trimmed mean | 6.150 | 3 | 76 | .001 |
| TimeNearCornerAfterEarthquake | Based on Mean | 17.826 | 3 | 76 | .000 |
| | Based on Median | 4.020 | 3 | 76 | .010 |
| | Based on Median and with adjusted df | 4.020 | 3 | 19.058 | .023 |
| | Based on trimmed mean | 10.526 | 3 | 76 | .000 |

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

a. Design: Intercept + Task + Information + Task * 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 | 57.246 | 1 | 57.246 | 4.722 | .033 | .059 |
| Task | 41.955 | 1 | 41.955 | 3.461 | .067 | .044 |
| Information | 50.096 | 1 | 50.096 | 4.133 | .046 | .052 |
| Task * Information | 43.651 | 1 | 43.651 | 3.601 | .062 | .045 |
| Error | 921.296 | 76 | 12.122 | | | |

### Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

| Source | Noncent. Parameter | Observed Power[a] |
|---|---|---|
| Intercept | 4.722 | .574 |
| Task | 3.461 | .451 |
| Information | 4.133 | .519 |
| Task * Information | 3.601 | .466 |
| 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 |
| .488 | .225 | .041 | .936 |

## 2. Task

### Estimates

Measure: MEASURE_1

| Task | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| Book Task | .070 | .318 | -.563 | .703 |
| No Task | .907 | .318 | .273 | 1.540 |

### Pairwise Comparisons

Measure: MEASURE_1

| (I) Task | (J) Task | Mean Difference (I-J) | Std. Error | Sig.[a] | 95% Confidence Interval for Difference[a] | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| Book Task | No Task | -.836 | .449 | .067 | -1.731 | .059 |
| No Task | Book Task | .836 | .449 | .067 | -.059 | 1.731 |

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 | 13.985 | 1 | 13.985 | 3.461 | .067 | .044 |
| Error | 307.099 | 76 | 4.041 | | | |

### Univariate Tests

Measure: MEASURE_1

| | Noncent. Parameter | Observed Power[a] |
|---|---|---|
| Contrast | 3.461 | .451 |
| Error | | |

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

a. Computed using alpha = .05

## 3. Information

### Estimates

Measure: MEASURE_1

| | | | 95% Confidence Interval | |
|---|---|---|---|---|
| Information | Mean | Std. Error | Lower Bound | Upper Bound |
| Given | .945 | .318 | .312 | 1.578 |
| Not Given | .032 | .318 | -.602 | .665 |

### Pairwise Comparisons

Measure: MEASURE_1

| | | | | | 95% Confidence Interval for Difference[b] | |
|---|---|---|---|---|---|---|
| (I) Information | (J) Information | Mean Difference (I-J) | Std. Error | Sig.[b] | Lower Bound | Upper Bound |
| Given | Not Given | .914* | .449 | .046 | .019 | 1.809 |
| Not Given | Given | -.914* | .449 | .046 | -1.809 | -.019 |

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Measure: MEASURE_1

| | Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|
| Contrast | 16.699 | 1 | 16.699 | 4.133 | .046 | .052 |
| Error | 307.099 | 76 | 4.041 | | | |

### Univariate Tests

Measure: MEASURE_1

| | Noncent. Parameter | Observed Power[a] |
|---|---|---|
| Contrast | 4.133 | .519 |
| 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

## 4. Time

### Estimates

Measure: MEASURE_1

| | | | 95% Confidence Interval | |
|---|---|---|---|---|
| Time | Mean | Std. Error | Lower Bound | Upper Bound |
| 1 | .062 | .062 | -.061 | .185 |
| 2 | 1.204 | .658 | -.106 | 2.514 |
| 3 | .199 | .097 | .006 | .392 |

## Pairwise Comparisons

Measure: MEASURE_1

| (I) Time | (J) Time | Mean Difference (I-J) | Std. Error | Sig.[a] | 95% Confidence Interval for Difference[a] | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1 | 2 | -1.142 | .659 | .262 | -2.757 | .472 |
| | 3 | -.137 | .115 | .706 | -.419 | .144 |
| 2 | 1 | 1.142 | .659 | .262 | -.472 | 2.757 |
| | 3 | 1.005 | .660 | .395 | -.610 | 2.620 |
| 3 | 1 | .137 | .115 | .706 | -.144 | .419 |
| | 2 | -1.005 | .660 | .395 | -2.620 | .610 |

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 | .051 | 2.028[a] | 2.000 | 75.000 | .139 | .051 |
| Wilks' lambda | .949 | 2.028[a] | 2.000 | 75.000 | .139 | .051 |
| Hotelling's trace | .054 | 2.028[a] | 2.000 | 75.000 | .139 | .051 |
| Roy's largest root | .054 | 2.028[a] | 2.000 | 75.000 | .139 | .051 |

## Multivariate Tests

| | Noncent. Parameter | Observed Power[b] |
|---|---|---|
| Pillai's trace | 4.056 | .406 |
| Wilks' lambda | 4.056 | .406 |
| Hotelling's trace | 4.056 | .406 |
| Roy's largest root | 4.056 | .406 |

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

## 5. Task * Information

Measure: MEASURE_1

| Task | Information | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| Book Task | Given | .101 | .449 | -.795 | .996 |
| | Not Given | .040 | .449 | -.855 | .935 |
| No Task | Given | 1.790 | .449 | .895 | 2.685 |
| | Not Given | .023 | .449 | -.872 | .918 |

## 6. Task * Time

Measure: MEASURE_1

| Task | Time | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| Book Task | 1 | .124 | .087 | -.050 | .297 |
| | 2 | .087 | .930 | -1.765 | 1.940 |
| | 3 | .000 | .137 | -.273 | .273 |
| No Task | 1 | .000 | .087 | -.174 | .174 |
| | 2 | 2.321 | .930 | .468 | 4.174 |
| | 3 | .398 | .137 | .126 | .671 |

## 7. Information * Time

Measure: MEASURE_1

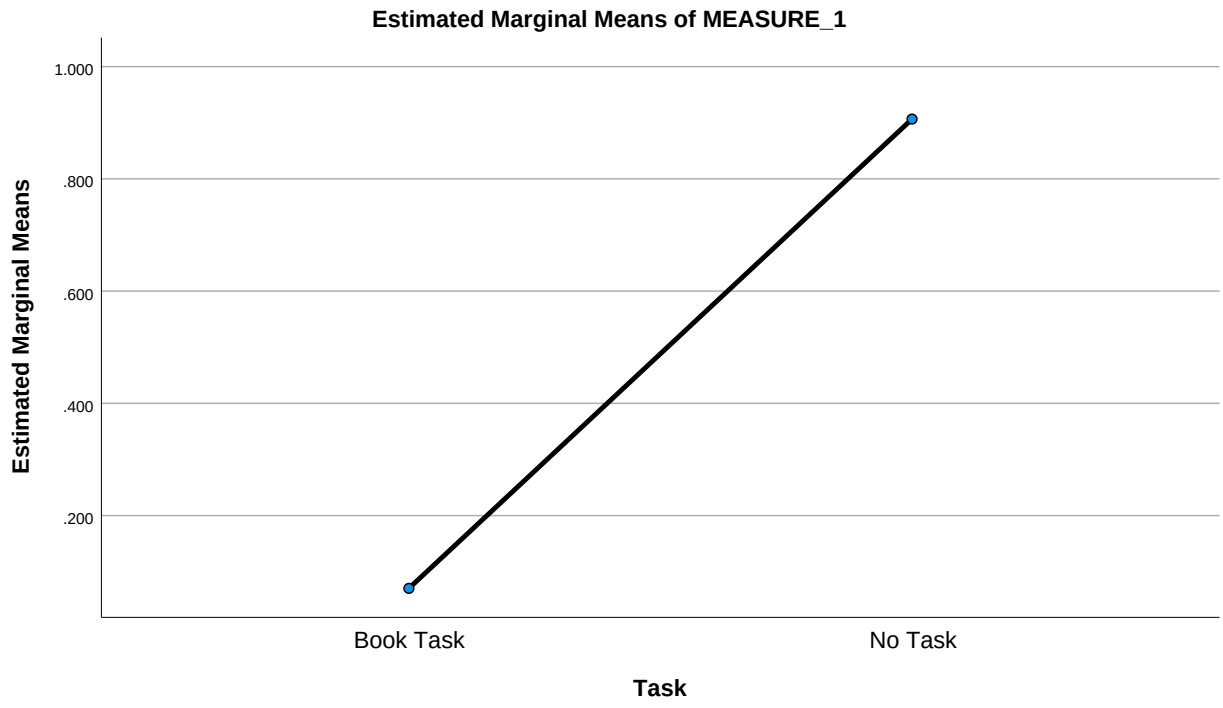
| Information | Time | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| Given | 1 | .124 | .087 | -.050 | .297 |
| | 2 | 2.321 | .930 | .469 | 4.174 |
| | 3 | .391 | .137 | .118 | .664 |
| Not Given | 1 | .000 | .087 | -.174 | .174 |
| | 2 | .087 | .930 | -1.766 | 1.940 |
| | 3 | .008 | .137 | -.265 | .280 |

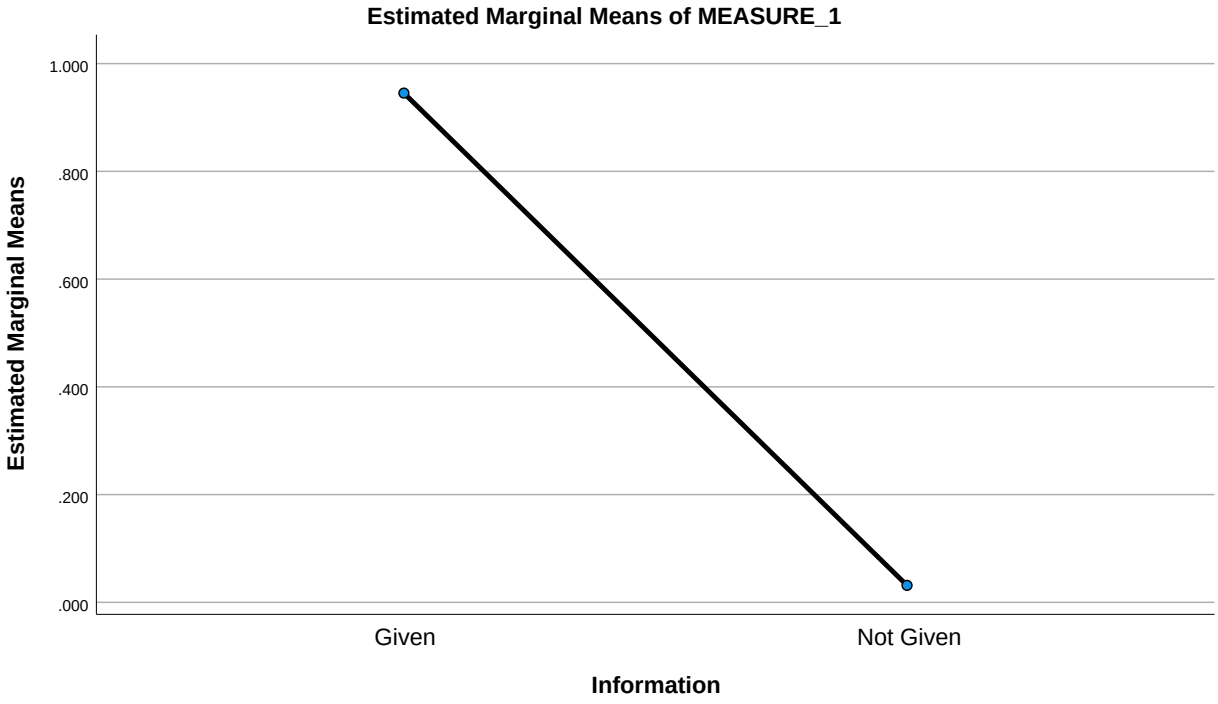
## 8. Task * Information * Time

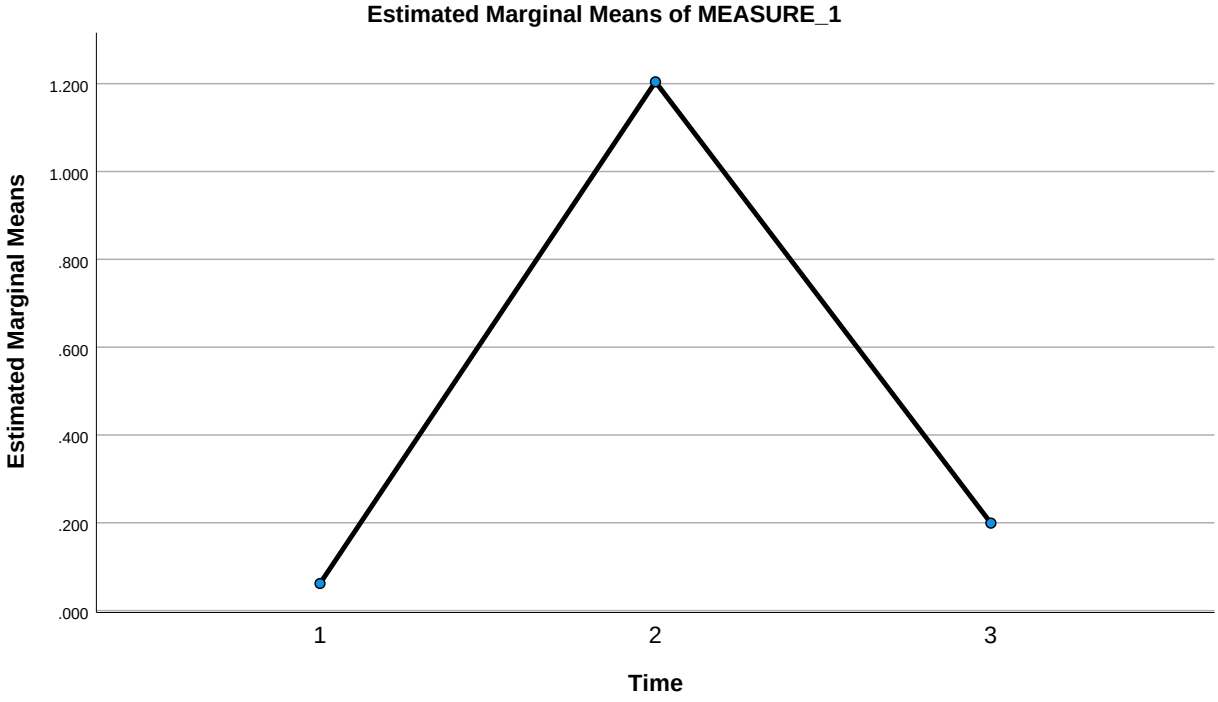
Measure: MEASURE_1

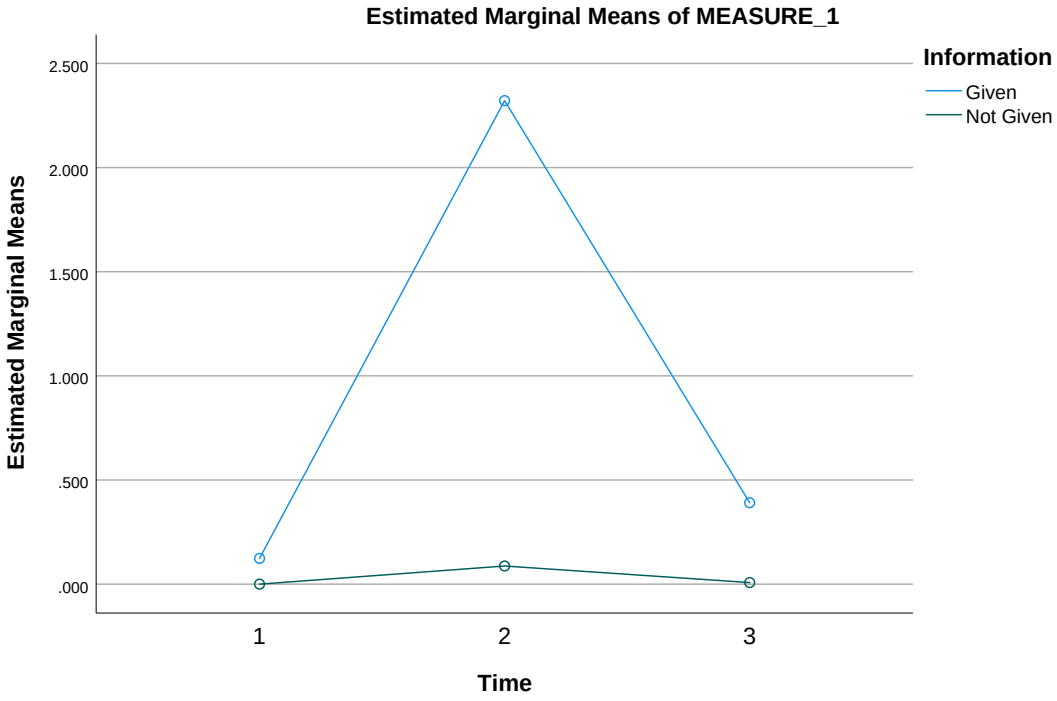
| Task | Information | Time | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| Book Task | Given | 1 | .247 | .124 | .001 | .493 |
| | | 2 | .055 | 1.316 | -2.565 | 2.675 |
| | | 3 | 5.551E-17 | .194 | -.386 | .386 |
| | Not Given | 1 | -2.776E-17 | .124 | -.246 | .246 |
| | | 2 | .120 | 1.316 | -2.501 | 2.740 |
| | | 3 | .000 | .194 | -.386 | .386 |
| No Task | Given | 1 | -2.776E-17 | .124 | -.246 | .246 |
| | | 2 | 4.588 | 1.316 | 1.967 | 7.208 |
| | | 3 | .782 | .194 | .396 | 1.168 |
| | Not Given | 1 | 2.776E-17 | .124 | -.246 | .246 |
| | | 2 | .054 | 1.316 | -2.566 | 2.675 |
| | | 3 | .015 | .194 | -.371 | .401 |

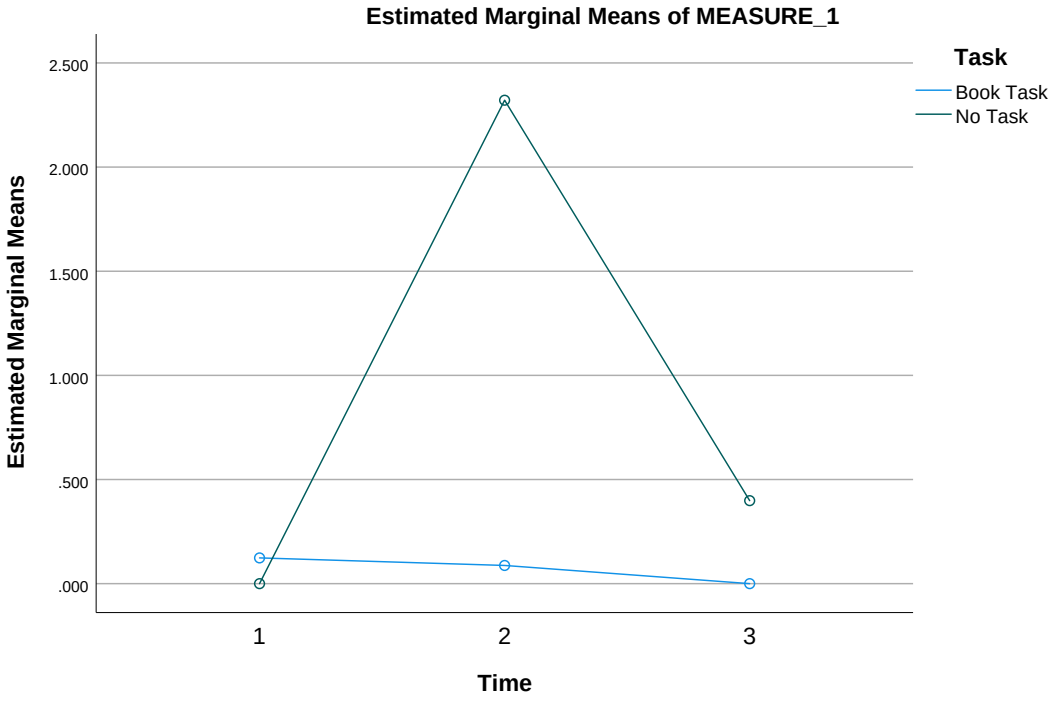
### Profile Plots



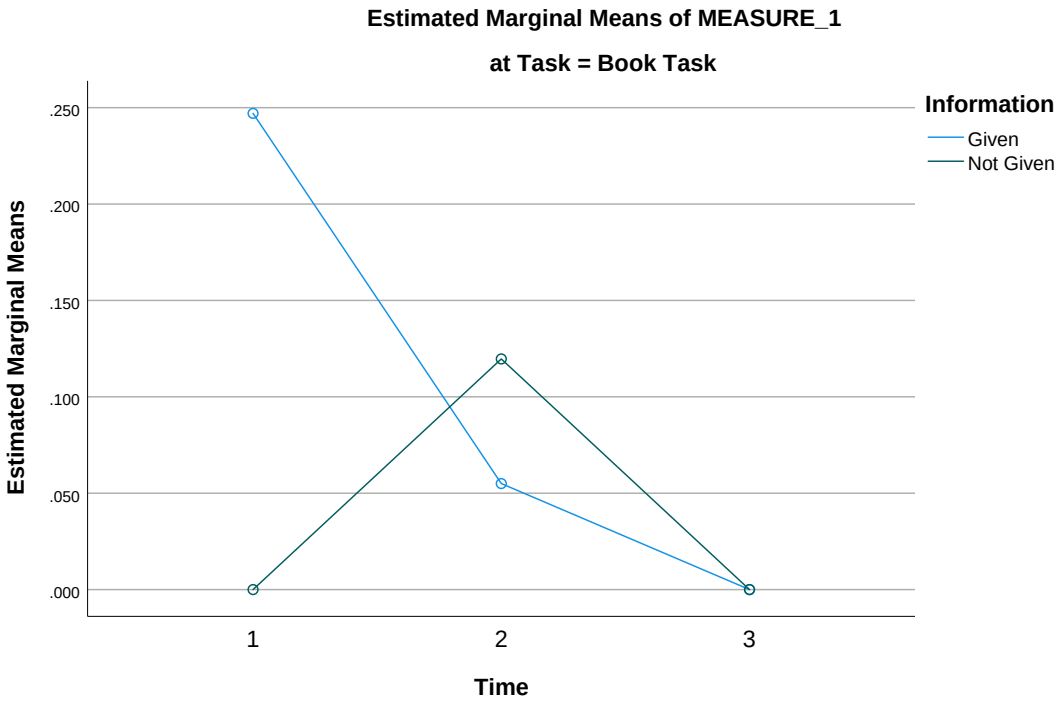

Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
1.000
.800
.600
.400
.200
.000
Given
Not Given
Information

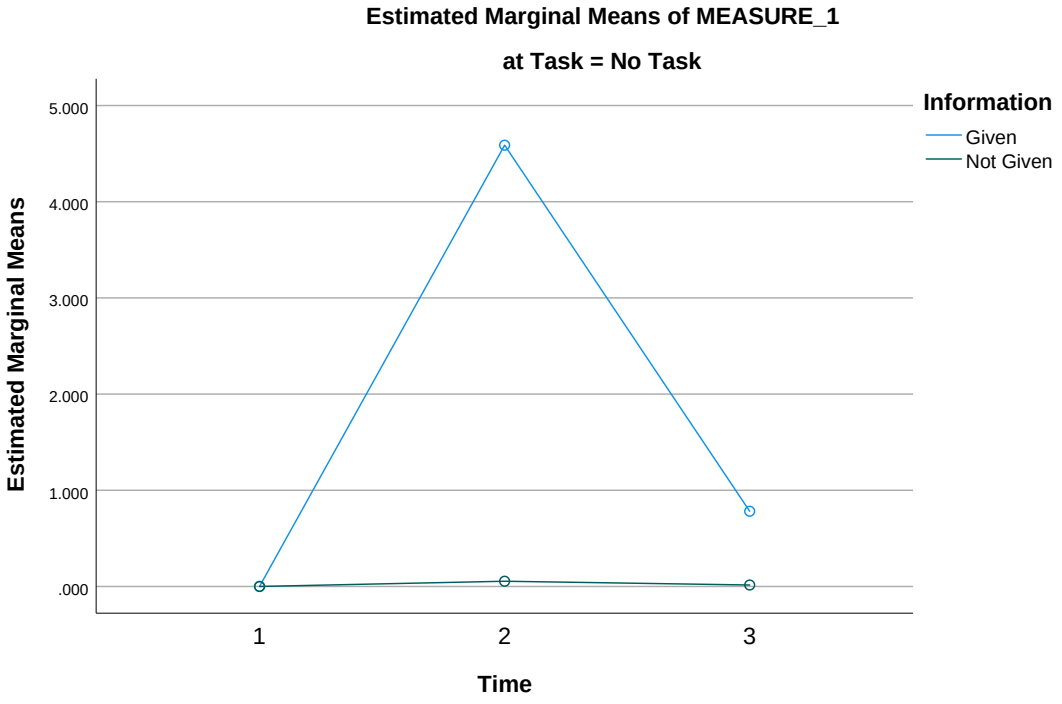

Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
1.200
1.000
.800
.600
.400
.200
.000
1
2
3
Time




**Time * Information * Task**


Estimated Marginal Means of MEASURE_1
at Task = Book Task
Estimated Marginal Means
.250
.200
.150
.100
.050
.000
1
2
3
Time
Information
Given
Not Given


Estimated Marginal Means of MEASURE_1
at Task = No Task
Estimated Marginal Means
5.000
4.000
3.000
2.000
1.000
.000
1
2
3
Time
Information
Given
Not Given