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	BooksPlacedBeforeEarthquake
2	BooksPlacedDuringEarthquake
3	BooksPlacedAfterEarthquake

Between-Subjects Factors

		N
Information	Given	40
	Not Given	40

Descriptive Statistics

	Information	Mean	Std. Deviation	N
BooksPlacedBeforeEarthquake	Given	1.325	1.8590	40
	Not Given	1.675	2.1767	40
	Total	1.500	2.0189	80
BooksPlacedDuringEarthquake	Given	.700	1.5225	40
	Not Given	1.250	1.5484	40
	Total	.975	1.5506	80
BooksPlacedAfterEarthquake	Given	2.325	2.9905	40
	Not Given	1.900	2.3621	40
	Total	2.113	2.6861	80

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

Box's M	11.292
F	1.803
df1	6
df2	44080.302
Sig.	.094

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	.246	12.557[b]	2.000	77.000	.000
	Wilks' Lambda	.754	12.557[b]	2.000	77.000	.000
	Hotelling's Trace	.326	12.557[b]	2.000	77.000	.000
	Roy's Largest Root	.326	12.557[b]	2.000	77.000	.000
Time * Information	Pillai's Trace	.050	2.009[b]	2.000	77.000	.141
	Wilks' Lambda	.950	2.009[b]	2.000	77.000	.141
	Hotelling's Trace	.052	2.009[b]	2.000	77.000	.141
	Roy's Largest Root	.052	2.009[b]	2.000	77.000	.141

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Time	Pillai's Trace	.246	25.114	.995
	Wilks' Lambda	.246	25.114	.995
	Hotelling's Trace	.246	25.114	.995
	Roy's Largest Root	.246	25.114	.995
Time * Information	Pillai's Trace	.050	4.017	.403
	Wilks' Lambda	.050	4.017	.403
	Hotelling's Trace	.050	4.017	.403
	Roy's Largest Root	.050	4.017	.403

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	.802	16.975	2	.000	.835

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Time	.862	.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	51.858	2	25.929	13.297
	Greenhouse-Geisser	51.858	1.670	31.059	13.297
	Huynh-Feldt	51.858	1.724	30.085	13.297
	Lower-bound	51.858	1.000	51.858	13.297
Time * Information	Sphericity Assumed	10.608	2	5.304	2.720
	Greenhouse-Geisser	10.608	1.670	6.354	2.720
	Huynh-Feldt	10.608	1.724	6.154	2.720
	Lower-bound	10.608	1.000	10.608	2.720
Error(Time)	Sphericity Assumed	304.200	156	1.950	
	Greenhouse-Geisser	304.200	130.233	2.336	
	Huynh-Feldt	304.200	134.451	2.263	
	Lower-bound	304.200	78.000	3.900	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Time	Sphericity Assumed	.000	.146	26.594	.997
	Greenhouse-Geisser	.000	.146	22.201	.993
	Huynh-Feldt	.000	.146	22.920	.994
	Lower-bound	.000	.146	13.297	.950
Time * Information	Sphericity Assumed	.069	.034	5.440	.532
	Greenhouse-Geisser	.079	.034	4.542	.483
	Huynh-Feldt	.077	.034	4.689	.491
	Lower-bound	.103	.034	2.720	.370
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	15.006	1	15.006	6.177	.015
	Quadratic	36.852	1	36.852	25.058	.000
Time * Information	Linear	6.006	1	6.006	2.472	.120
	Quadratic	4.602	1	4.602	3.129	.081
Error(Time)	Linear	189.487	78	2.429		
	Quadratic	114.713	78	1.471		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Time	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Time	Linear	.073	6.177	.690
	Quadratic	.243	25.058	.999
Time * Information	Linear	.031	2.472	.342
	Quadratic	.039	3.129	.416
Error(Time)	Linear			
	Quadratic			

a. Computed using alpha = .05

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

		Levene Statistic	df1	df2	Sig.
BooksPlacedBeforeEarthquake	Based on Mean	1.240	1	78	.269
	Based on Median	.728	1	78	.396
	Based on Median and with adjusted df	.728	1	77.945	.396
	Based on trimmed mean	1.307	1	78	.257
BooksPlacedDuringEarthquake	Based on Mean	2.440	1	78	.122
	Based on Median	3.279	1	78	.074
	Based on Median and with adjusted df	3.279	1	73.188	.074
	Based on trimmed mean	3.001	1	78	.087
BooksPlacedAfterEarthquake	Based on Mean	2.401	1	78	.125
	Based on Median	.583	1	78	.447
	Based on Median and with adjusted df	.583	1	77.233	.447
	Based on trimmed mean	1.749	1	78	.190

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	561.204	1	561.204	57.174	.000	.423
Information	1.504	1	1.504	.153	.697	.002
Error	765.625	78	9.816			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	57.174	1.000
Information	.153	.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
1.529	.202	1.127	1.932

2. Information

Estimates

Measure: MEASURE_1

Information	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Given	1.450	.286	.881	2.019
Not Given	1.608	.286	1.039	2.178

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	.404	.697	-.964	.647
Not Given	Given	.158	.404	.697	-.647	.964

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	.153	.697	.002
Error	255.208	78	3.272			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	.153	.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	1.500	.226	1.049	1.951
2	.975	.172	.633	1.317
3	2.113	.301	1.513	2.712

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	.525*	.165	.006	.122	.928
	3	-.613*	.246	.045	-1.215	-.010
2	1	-.525*	.165	.006	-.928	-.122
	3	-1.138*	.242	.000	-1.729	-.546
3	1	.613*	.246	.045	.010	1.215
	2	1.138*	.242	.000	.546	1.729

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	.246	12.557[a]	2.000	77.000	.000	.246
Wilks' lambda	.754	12.557[a]	2.000	77.000	.000	.246
Hotelling's trace	.326	12.557[a]	2.000	77.000	.000	.246
Roy's largest root	.326	12.557[a]	2.000	77.000	.000	.246

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	25.114	.995
Wilks' lambda	25.114	.995
Hotelling's trace	25.114	.995
Roy's largest root	25.114	.995

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

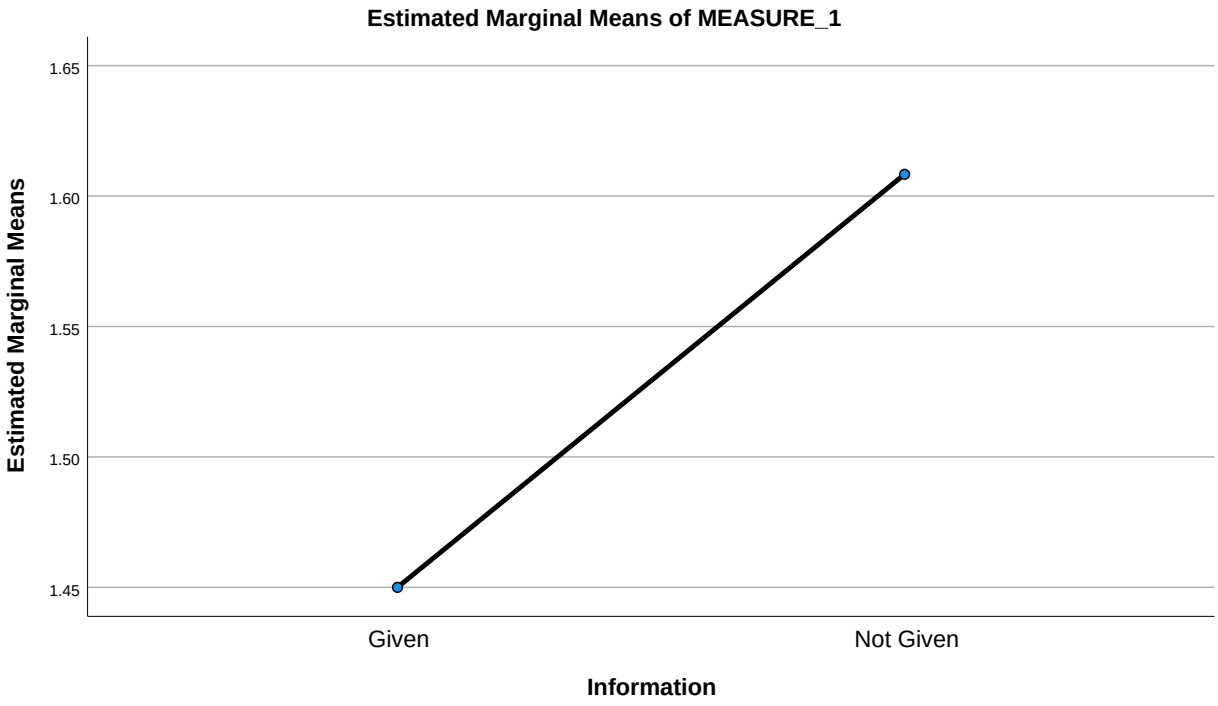
b. Computed using alpha = .05

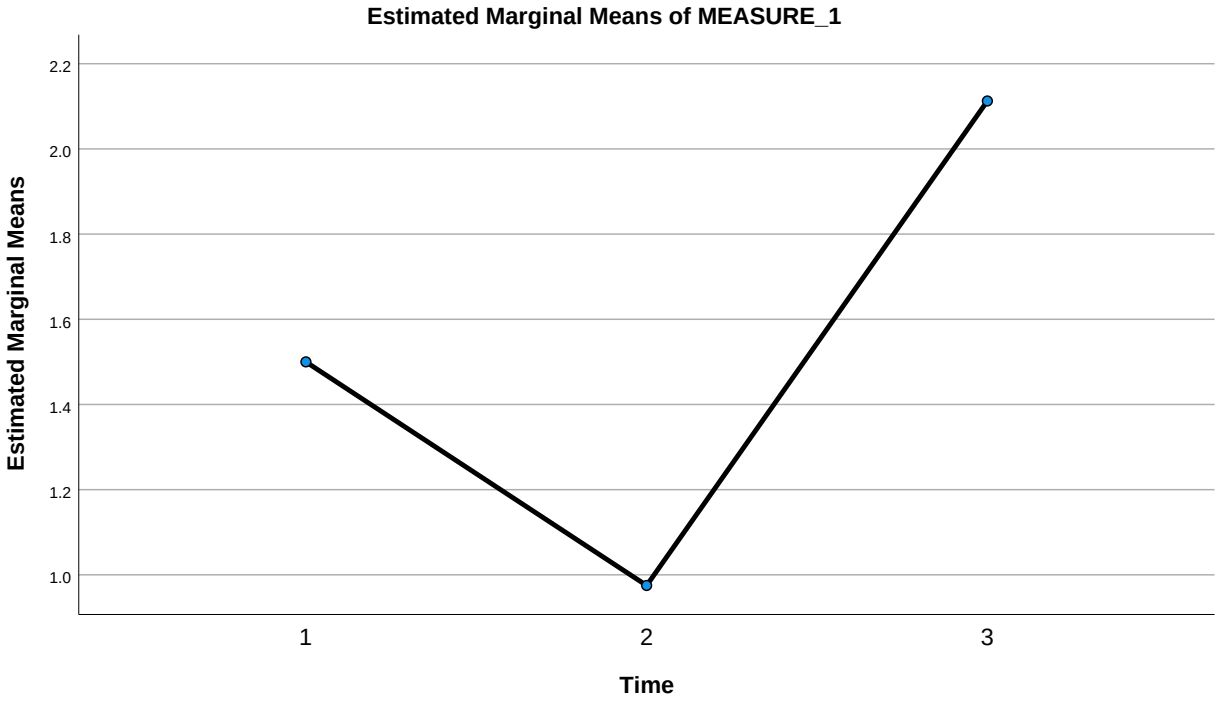
4. Information * Time

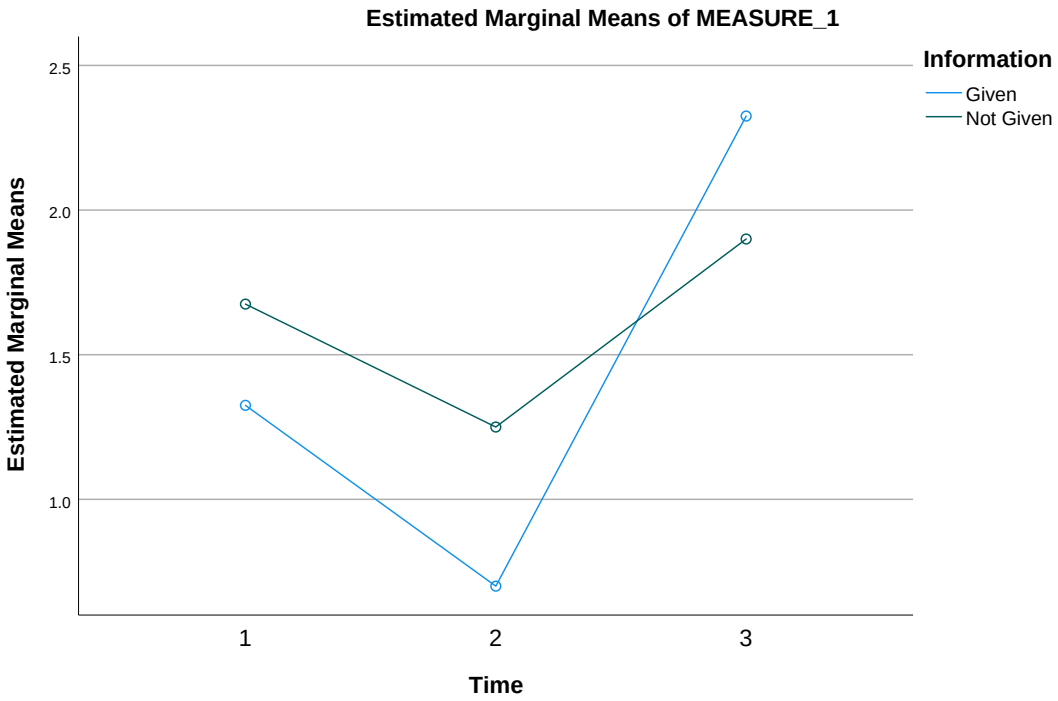
Measure: MEASURE_1

				95% Confidence Interval	
Information	Time	Mean	Std. Error	Lower Bound	Upper Bound
Given	1	1.325	.320	.688	1.962
	2	.700	.243	.217	1.183
	3	2.325	.426	1.477	3.173
Not Given	1	1.675	.320	1.038	2.312
	2	1.250	.243	.767	1.733
	3	1.900	.426	1.052	2.748

Profile Plots


Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
1.65
1.60
1.55
1.50
1.45
Given
Not Given
Information


Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
2.2
2.0
1.8
1.6
1.4
1.2
1.0
1
2
3
Time


Estimated Marginal Means of MEASURE_1
Information
Given
Not Given
Estimated Marginal Means
2.5
2.0
1.5
1.0
1
2
3
Time