Books Placed

[DataSet1] D:\Acads\mtp\Data_Analsysis\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	BooksPlacedBeforeEarthquake
2	BooksPlacedDuringEarthquake
3	BooksPlacedAfterEarthquake

Between-Subjects Factors

		N
Information	Given	20
	Not Given	20

Descriptive Statistics

	Information	Mean	Std. Deviation	N
BooksPlacedBeforeEarthquake	Given	2.650	1.8432	20
	Not Given	3.350	1.9541	20
	Total	3.000	1.9081	40
BooksPlacedDuringEarthquake	Given	1.400	1.9304	20
	Not Given	2.500	1.2773	20
	Total	1.950	1.7090	40
BooksPlacedAfterEarthquake	Given	4.650	2.6413	20
	Not Given	3.800	1.9628	20
	Total	4.225	2.3369	40

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

Box's M	5.566
F	.848
df1	6
df2	10462.189
Sig.	.533

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	.509	19.201[b]	2.000	37.000	.000
	Wilks' Lambda	.491	19.201[b]	2.000	37.000	.000
	Hotelling's Trace	1.038	19.201[b]	2.000	37.000	.000
	Roy's Largest Root	1.038	19.201[b]	2.000	37.000	.000
Time * Information	Pillai's Trace	.138	2.956[b]	2.000	37.000	.064
	Wilks' Lambda	.862	2.956[b]	2.000	37.000	.064
	Hotelling's Trace	.160	2.956[b]	2.000	37.000	.064
	Roy's Largest Root	.160	2.956[b]	2.000	37.000	.064

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Time	Pillai's Trace	.509	38.402	1.000
	Wilks' Lambda	.509	38.402	1.000
	Hotelling's Trace	.509	38.402	1.000
	Roy's Largest Root	.509	38.402	1.000
Time * Information	Pillai's Trace	.138	5.911	.541
	Wilks' Lambda	.138	5.911	.541
	Hotelling's Trace	.138	5.911	.541
	Roy's Largest Root	.138	5.911	.541

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	.793	8.597	2	.014	.828

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Time	.884	.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	103.717	2	51.858	16.304
	Greenhouse-Geisser	103.717	1.657	62.611	16.304
	Huynh-Feldt	103.717	1.768	58.658	16.304
	Lower-bound	103.717	1.000	103.717	16.304
Time * Information	Sphericity Assumed	21.217	2	10.608	3.335
	Greenhouse-Geisser	21.217	1.657	12.808	3.335
	Huynh-Feldt	21.217	1.768	11.999	3.335
	Lower-bound	21.217	1.000	21.217	3.335
Error(Time)	Sphericity Assumed	241.733	76	3.181	
	Greenhouse-Geisser	241.733	62.948	3.840	
	Huynh-Feldt	241.733	67.190	3.598	
	Lower-bound	241.733	38.000	6.361	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Time	Sphericity Assumed	.000	.300	32.608	.999
	Greenhouse-Geisser	.000	.300	27.008	.998
	Huynh-Feldt	.000	.300	28.828	.999
	Lower-bound	.000	.300	16.304	.976
Time * Information	Sphericity Assumed	.041	.081	6.670	.615
	Greenhouse-Geisser	.051	.081	5.525	.558
	Huynh-Feldt	.047	.081	5.897	.577
	Lower-bound	.076	.081	3.335	.429
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	30.012	1	30.012	6.769	.013
	Quadratic	73.704	1	73.704	38.231	.000
Time * Information	Linear	12.012	1	12.012	2.709	.108
	Quadratic	9.204	1	9.204	4.774	.035
Error(Time)	Linear	168.475	38	4.434		
	Quadratic	73.258	38	1.928		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Time	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Time	Linear	.151	6.769	.718
	Quadratic	.502	38.231	1.000
Time * Information	Linear	.067	2.709	.361
	Quadratic	.112	4.774	.567
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	.410	1	38	.526
	Based on Median	.046	1	38	.831
	Based on Median and with adjusted df	.046	1	37.849	.831
	Based on trimmed mean	.227	1	38	.637
BooksPlacedDuringEarthquake	Based on Mean	.713	1	38	.404
	Based on Median	.218	1	38	.643
	Based on Median and with adjusted df	.218	1	32.046	.643
	Based on trimmed mean	.287	1	38	.595
BooksPlacedAfterEarthquake	Based on Mean	1.878	1	38	.179
	Based on Median	1.011	1	38	.321
	Based on Median and with adjusted df	1.011	1	35.317	.322
	Based on trimmed mean	1.587	1	38	.215

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	1122.408	1	1122.408	210.192	.000	.847
Information	3.008	1	3.008	.563	.458	.015
Error	202.917	38	5.340			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	210.192	1.000
Information	.563	.113
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
3.058	.211	2.631	3.485

2. Information

Estimates

Measure: MEASURE_1

Information	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Given	2.900	.298	2.296	3.504
Not Given	3.217	.298	2.613	3.821

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	-.317	.422	.458	-1.171	.537
Not Given	Given	.317	.422	.458	-.537	1.171

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	1.003	1	1.003	.563	.458	.015
Error	67.639	38	1.780			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	.563	.113
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

			95% Confidence Interval	
Time	Mean	Std. Error	Lower Bound	Upper Bound
1	3.000	.300	2.392	3.608
2	1.950	.259	1.426	2.474
3	4.225	.368	3.480	4.970

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	1.050*	.310	.005	.273	1.827
	3	-1.225*	.471	.039	-2.404	-.046
2	1	-1.050*	.310	.005	-1.827	-.273
	3	-2.275*	.399	.000	-3.274	-1.276
3	1	1.225*	.471	.039	.046	2.404
	2	2.275*	.399	.000	1.276	3.274

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	.509	19.201[a]	2.000	37.000	.000	.509
Wilks' lambda	.491	19.201[a]	2.000	37.000	.000	.509
Hotelling's trace	1.038	19.201[a]	2.000	37.000	.000	.509
Roy's largest root	1.038	19.201[a]	2.000	37.000	.000	.509

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	38.402	1.000
Wilks' lambda	38.402	1.000
Hotelling's trace	38.402	1.000
Roy's largest root	38.402	1.000

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

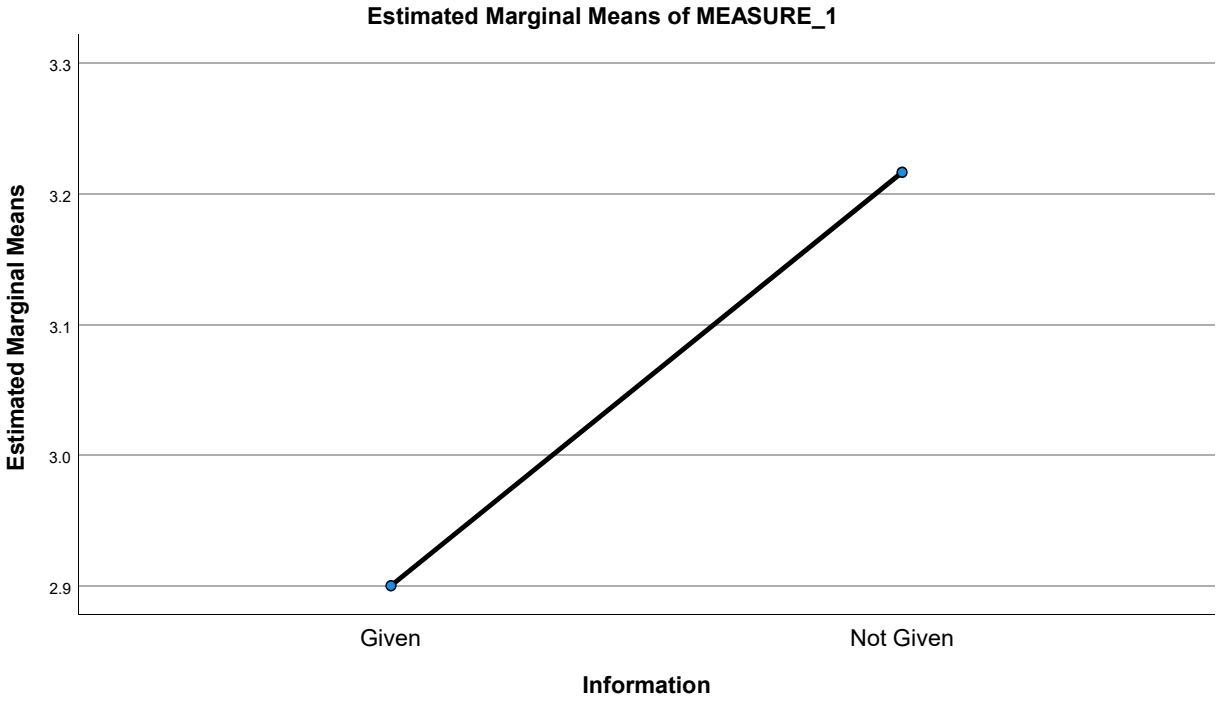
b. Computed using alpha = .05

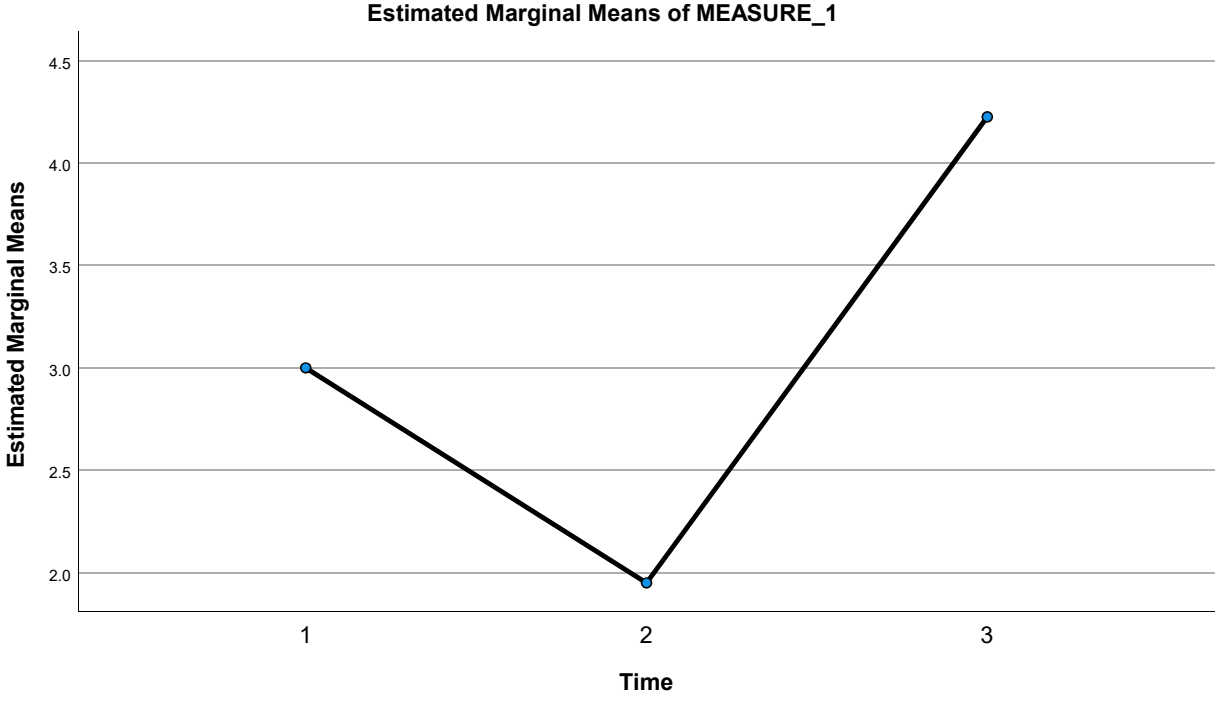
4. Information * Time

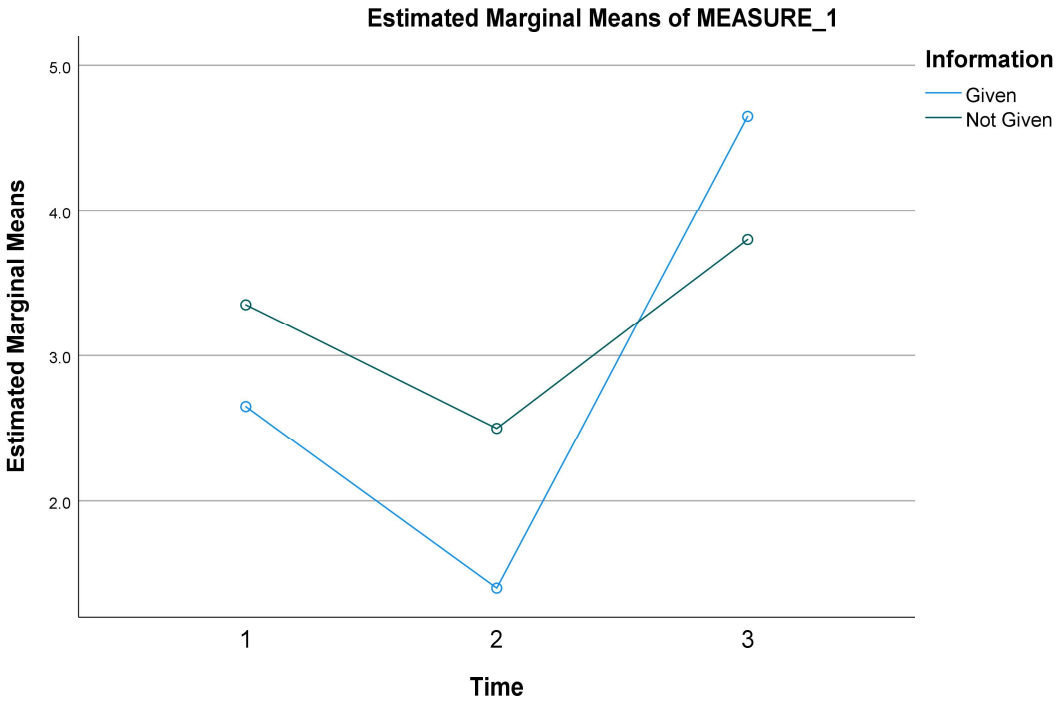
Measure: MEASURE_1

				95% Confidence Interval	
Information	Time	Mean	Std. Error	Lower Bound	Upper Bound
Given	1	2.650	.425	1.790	3.510
	2	1.400	.366	.659	2.141
	3	4.650	.520	3.597	5.703
Not Given	1	3.350	.425	2.490	4.210
	2	2.500	.366	1.759	3.241
	3	3.800	.520	2.747	4.853

Profile Plots


Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
3.3
3.2
3.1
3.0
2.9
Given
Not Given
Information


Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
4.5
4.0
3.5
3.0
2.5
2.0
1
2
3
Time


Estimated Marginal Means of MEASURE_1
Information
Given
Not Given
Estimated Marginal Means
5.0
4.0
3.0
2.0
1
2
3
Time