General Linear Model

Warnings

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	TimeNearWall BeforeEarthquake
2	TimeNearWall DuringEarthquake
3	TimeNearWall AfterEarthquake

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
TimeNearWallBeforeEarthquake	Book Task	Given	2.90750	4.576285	20
		Not Given	3.33635	5.968582	20
		Total	3.12192	5.254058	40
	No Task	Given	5.02950	8.625563	20
		Not Given	5.34955	11.288039	20
		Total	5.18953	9.917102	40
	Total	Given	3.96850	6.899536	40
		Not Given	4.34295	8.970553	40
		Total	4.15573	7.953748	80
TimeNearWallDuringEarthquake	Book Task	Given	10.86440	15.471595	20
		Not Given	3.68965	8.285225	20
		Total	7.27703	12.777243	40
	No Task	Given	20.51820	21.821426	20
		Not Given	7.77765	12.087192	20
		Total	14.14793	18.568265	40
	Total	Given	15.69130	19.300134	40
		Not Given	5.73365	10.435732	40
		Total	10.71248	16.209734	80
TimeNearWallAfterEarthquake	Book Task	Given	5.46400	5.842430	20
		Not Given	8.54530	18.092405	20
		Total	7.00465	13.361691	40
	No Task	Given	22.02140	24.058045	20
		Not Given	7.71585	19.879864	20
		Total	14.86863	22.956178	40
	Total	Given	13.74270	19.206717	40
		Not Given	8.13058	18.766594	40
		Total	10.93664	19.077509	80

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

Box's M	142.936
F	7.368
df1	18
df2	20410.896
Sig.	.000

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

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

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Time	Pillai's Trace	.198	9.270[b]	2.000	75.000
	Wilks' Lambda	.802	9.270[b]	2.000	75.000
	Hotelling's Trace	.247	9.270[b]	2.000	75.000
	Roy's Largest Root	.247	9.270[b]	2.000	75.000
Time * Task	Pillai's Trace	.035	1.374[b]	2.000	75.000
	Wilks' Lambda	.965	1.374[b]	2.000	75.000
	Hotelling's Trace	.037	1.374[b]	2.000	75.000
	Roy's Largest Root	.037	1.374[b]	2.000	75.000
Time * Information	Pillai's Trace	.122	5.206[b]	2.000	75.000
	Wilks' Lambda	.878	5.206[b]	2.000	75.000
	Hotelling's Trace	.139	5.206[b]	2.000	75.000
	Roy's Largest Root	.139	5.206[b]	2.000	75.000
Time * Task * Information	Pillai's Trace	.050	1.981[b]	2.000	75.000
	Wilks' Lambda	.950	1.981[b]	2.000	75.000
	Hotelling's Trace	.053	1.981[b]	2.000	75.000
	Roy's Largest Root	.053	1.981[b]	2.000	75.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Time	Pillai's Trace	.000	.198	18.540
	Wilks' Lambda	.000	.198	18.540
	Hotelling's Trace	.000	.198	18.540
	Roy's Largest Root	.000	.198	18.540
Time * Task	Pillai's Trace	.259	.035	2.748
	Wilks' Lambda	.259	.035	2.748
	Hotelling's Trace	.259	.035	2.748
	Roy's Largest Root	.259	.035	2.748
Time * Information	Pillai's Trace	.008	.122	10.412
	Wilks' Lambda	.008	.122	10.412
	Hotelling's Trace	.008	.122	10.412
	Roy's Largest Root	.008	.122	10.412
Time * Task * Information	Pillai's Trace	.145	.050	3.962
	Wilks' Lambda	.145	.050	3.962
	Hotelling's Trace	.145	.050	3.962
	Roy's Largest Root	.145	.050	3.962

Multivariate Tests[a]

Effect		Observed Power[c]
Time	Pillai's Trace	.973
	Wilks' Lambda	.973
	Hotelling's Trace	.973
	Roy's Largest Root	.973
Time * Task	Pillai's Trace	.287
	Wilks' Lambda	.287
	Hotelling's Trace	.287
	Roy's Largest Root	.287
Time * Information	Pillai's Trace	.815
	Wilks' Lambda	.815
	Hotelling's Trace	.815
	Roy's Largest Root	.815
Time * Task * Information	Pillai's Trace	.398
	Wilks' Lambda	.398
	Hotelling's Trace	.398
	Roy's Largest Root	.398

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	.887	8.982	2	.011	.899

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Time	.955	.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	2373.920	2	1186.960	7.991
	Greenhouse-Geisser	2373.920	1.797	1320.935	7.991
	Huynh-Feldt	2373.920	1.911	1242.498	7.991
	Lower-bound	2373.920	1.000	2373.920	7.991
Time * Task	Sphericity Assumed	384.372	2	192.186	1.294
	Greenhouse-Geisser	384.372	1.797	213.879	1.294
	Huynh-Feldt	384.372	1.911	201.179	1.294
	Lower-bound	384.372	1.000	384.372	1.294
Time * Information	Sphericity Assumed	1076.500	2	538.250	3.624
	Greenhouse-Geisser	1076.500	1.797	599.003	3.624
	Huynh-Feldt	1076.500	1.911	563.435	3.624
	Lower-bound	1076.500	1.000	1076.500	3.624
Time * Task * Information	Sphericity Assumed	780.078	2	390.039	2.626
	Greenhouse-Geisser	780.078	1.797	434.064	2.626
	Huynh-Feldt	780.078	1.911	408.289	2.626
	Lower-bound	780.078	1.000	780.078	2.626
Error(Time)	Sphericity Assumed	22576.533	152	148.530	
	Greenhouse-Geisser	22576.533	136.584	165.295	
	Huynh-Feldt	22576.533	145.206	155.480	
	Lower-bound	22576.533	76.000	297.060	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Time	Sphericity Assumed	.001	.095	15.983
	Greenhouse-Geisser	.001	.095	14.362
	Huynh-Feldt	.001	.095	15.268
	Lower-bound	.006	.095	7.991
Time * Task	Sphericity Assumed	.277	.017	2.588
	Greenhouse-Geisser	.276	.017	2.325
	Huynh-Feldt	.277	.017	2.472
	Lower-bound	.259	.017	1.294
Time * Information	Sphericity Assumed	.029	.046	7.248
	Greenhouse-Geisser	.034	.046	6.513
	Huynh-Feldt	.031	.046	6.924
	Lower-bound	.061	.046	3.624
Time * Task * Information	Sphericity Assumed	.076	.033	5.252
	Greenhouse-Geisser	.082	.033	4.719
	Huynh-Feldt	.078	.033	5.017
	Lower-bound	.109	.033	2.626
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	.953
	Greenhouse-Geisser	.936
	Huynh-Feldt	.946
	Lower-bound	.797
Time * Task	Sphericity Assumed	.277
	Greenhouse-Geisser	.263
	Huynh-Feldt	.271
	Lower-bound	.202
Time * Information	Sphericity Assumed	.662
	Greenhouse-Geisser	.629
	Huynh-Feldt	.648
	Lower-bound	.468
Time * Task * Information	Sphericity Assumed	.516
	Greenhouse-Geisser	.488
	Huynh-Feldt	.504
	Lower-bound	.360
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	1839.231	1	1839.231	9.868
	Quadratic	534.689	1	534.689	4.831
Time * Task	Linear	335.980	1	335.980	1.803
	Quadratic	48.393	1	48.393	.437
Time * Information	Linear	358.391	1	358.391	1.923
	Quadratic	718.109	1	718.109	6.489
Time * Task * Information	Linear	746.328	1	746.328	4.004
	Quadratic	33.751	1	33.751	.305
Error(Time)	Linear	14165.400	76	186.387	
	Quadratic	8411.133	76	110.673	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Time	Linear	.002	.115	9.868	.873
	Quadratic	.031	.060	4.831	.583
Time * Task	Linear	.183	.023	1.803	.263
	Quadratic	.510	.006	.437	.100
Time * Information	Linear	.170	.025	1.923	.278
	Quadratic	.013	.079	6.489	.711
Time * Task * Information	Linear	.049	.050	4.004	.506
	Quadratic	.582	.004	.305	.085
Error(Time)	Linear				
	Quadratic				

a. Computed using alpha = .05

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

		Levene Statistic	df1	df2	Sig.
TimeNearWallBeforeEarthquake	Based on Mean	2.557	3	76	.061
	Based on Median	.460	3	76	.711
	Based on Median and with adjusted df	.460	3	53.503	.711
	Based on trimmed mean	1.455	3	76	.234
TimeNearWallDuringEarthquake	Based on Mean	10.534	3	76	.000
	Based on Median	4.935	3	76	.003
	Based on Median and with adjusted df	4.935	3	65.854	.004
	Based on trimmed mean	9.686	3	76	.000
TimeNearWallAfterEarthquake	Based on Mean	6.945	3	76	.000
	Based on Median	3.539	3	76	.019
	Based on Median and with adjusted df	3.539	3	58.410	.020
	Based on trimmed mean	5.937	3	76	.001

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	17757.057	1	17757.057	53.169	.000	.412
Task	1882.154	1	1882.154	5.636	.020	.069
Information	1539.319	1	1539.319	4.609	.035	.057
Task * Information	886.384	1	886.384	2.654	.107	.034
Error	25382.206	76	333.976			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	53.169	1.000
Task	5.636	.649
Information	4.609	.563
Task * Information	2.654	.363
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
8.602	1.180	6.252	10.951

2. Task

Estimates

Measure: MEASURE_1

Task	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Book Task	5.801	1.668	2.479	9.124
No Task	11.402	1.668	8.079	14.725

Pairwise Comparisons

Measure: MEASURE_1

(I) Task	(J) Task	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
Book Task	No Task	-5.601[*]	2.359	.020	-10.300	-.902
No Task	Book Task	5.601[*]	2.359	.020	.902	10.300

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	627.385	1	627.385	5.636	.020	.069
Error	8460.735	76	111.325			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	5.636	.649
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

Information	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Given	11.134	1.668	7.812	14.457
Not Given	6.069	1.668	2.746	9.392

Pairwise Comparisons

Measure: MEASURE_1

(I) Information	(J) Information	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
Given	Not Given	5.065[*]	2.359	.035	.366	9.764
Not Given	Given	-5.065[*]	2.359	.035	-9.764	-.366

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	513.106	1	513.106	4.609	.035	.057
Error	8460.735	76	111.325			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	4.609	.563
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

Time	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	4.156	.899	2.366	5.945
2	10.712	1.705	7.317	14.108
3	10.937	2.043	6.868	15.005

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	-6.557[*]	1.593	.000	-10.455	-2.658
	3	-6.781[*]	2.159	.007	-12.065	-1.496
2	1	6.557[*]	1.593	.000	2.658	10.455
	3	-.224	1.986	1.000	-5.086	4.638
3	1	6.781[*]	2.159	.007	1.496	12.065
	2	.224	1.986	1.000	-4.638	5.086

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	.198	9.270[a]	2.000	75.000	.000	.198
Wilks' lambda	.802	9.270[a]	2.000	75.000	.000	.198
Hotelling's trace	.247	9.270[a]	2.000	75.000	.000	.198
Roy's largest root	.247	9.270[a]	2.000	75.000	.000	.198

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	18.540	.973
Wilks' lambda	18.540	.973
Hotelling's trace	18.540	.973
Roy's largest root	18.540	.973

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	6.412	2.359	1.713	11.111
	Not Given	5.190	2.359	.491	9.889
No Task	Given	15.856	2.359	11.157	20.555
	Not Given	6.948	2.359	2.249	11.647

6. Task * Time

Measure: MEASURE_1

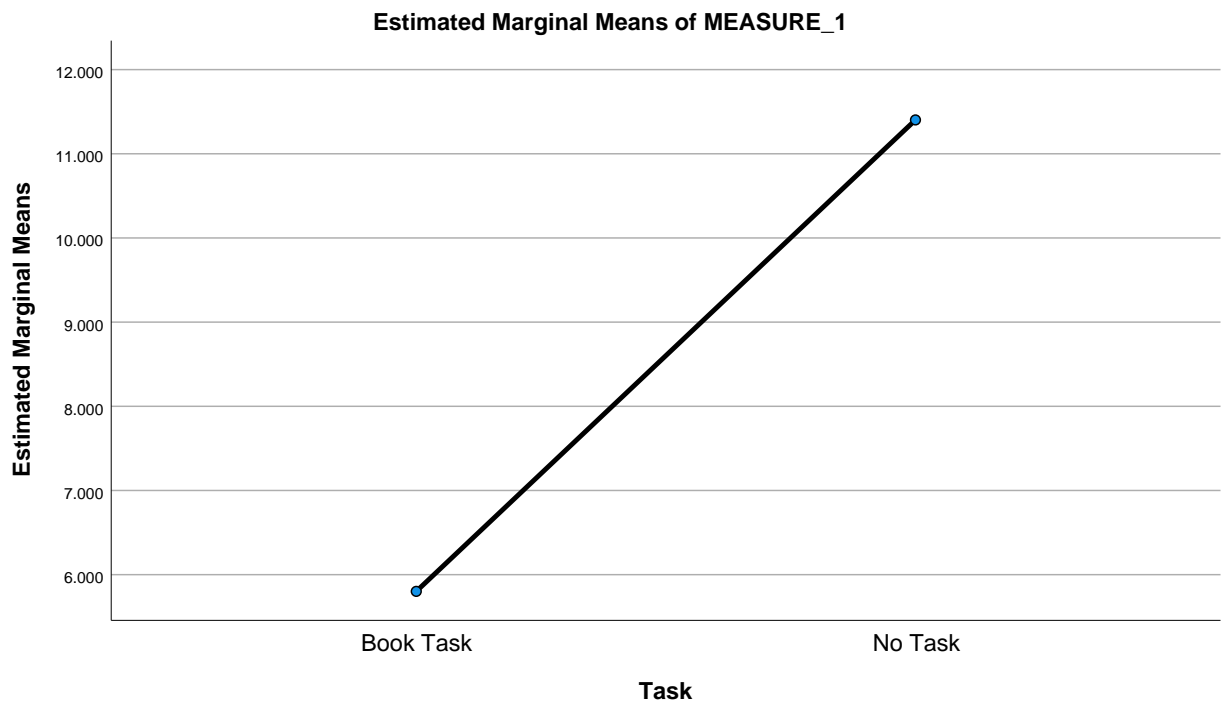| Task	Time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Book Task	1	3.122	1.271	.591	5.653
	2	7.277	2.411	2.475	12.080
	3	7.005	2.889	1.251	12.759
No Task	1	5.190	1.271	2.659	7.721
	2	14.148	2.411	9.345	18.950
	3	14.869	2.889	9.115	20.623

7. Information * Time

Measure: MEASURE_1

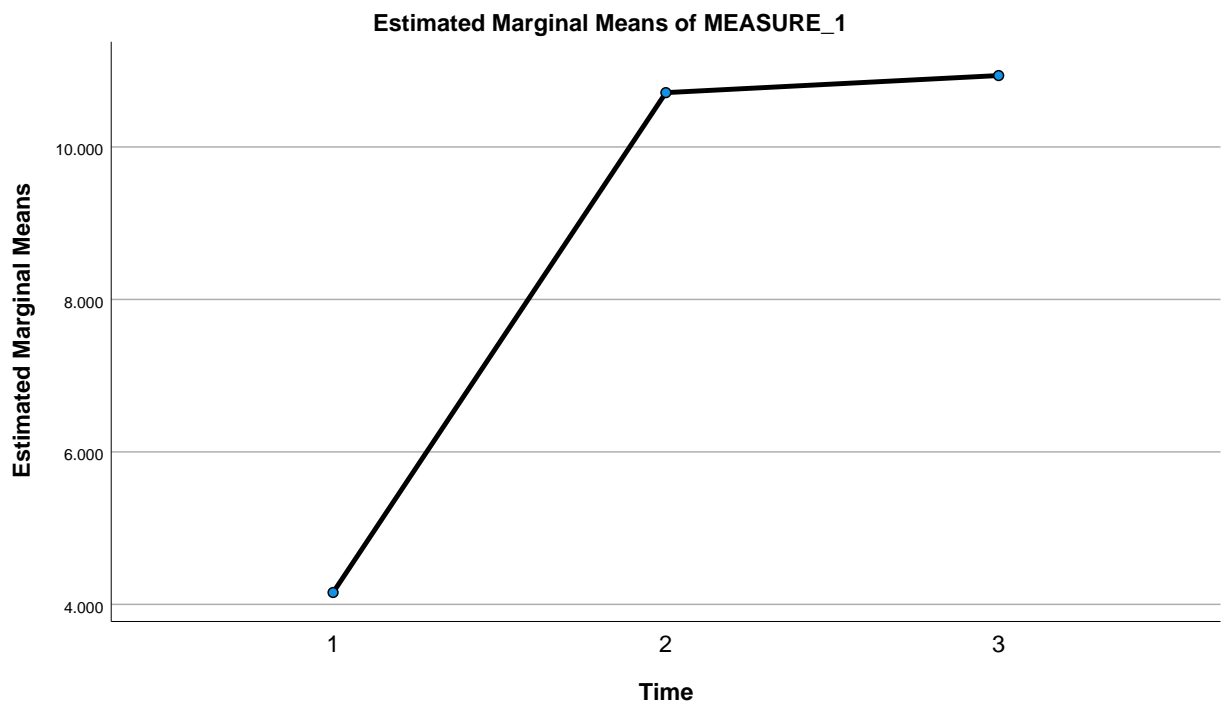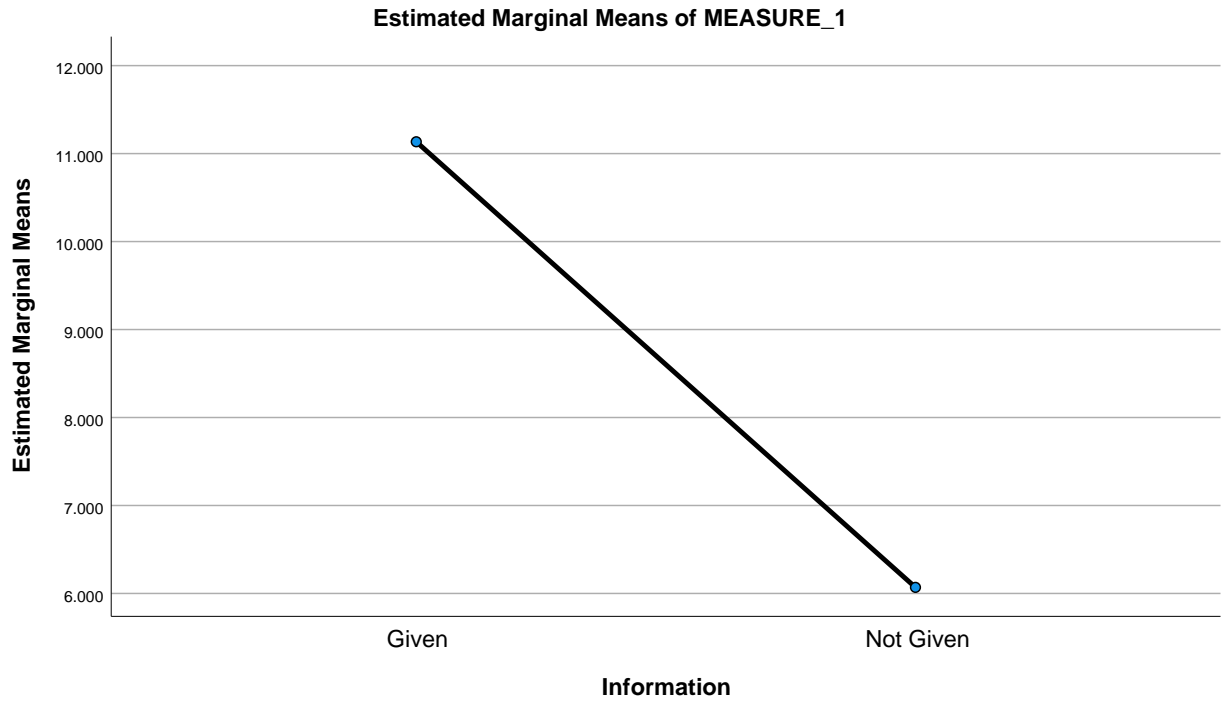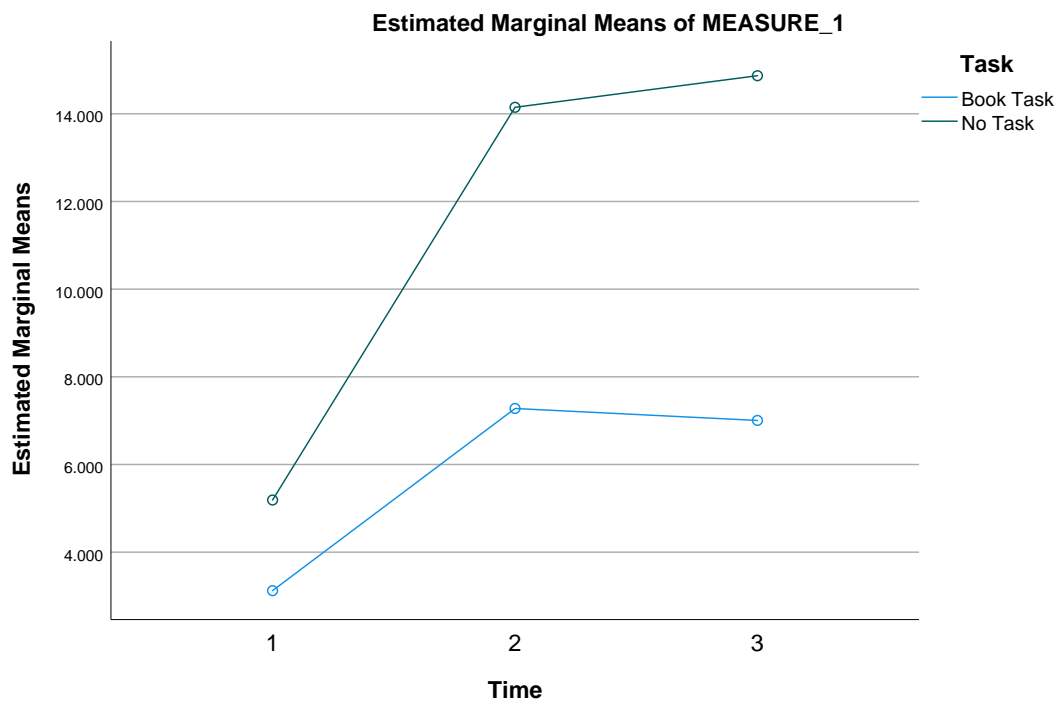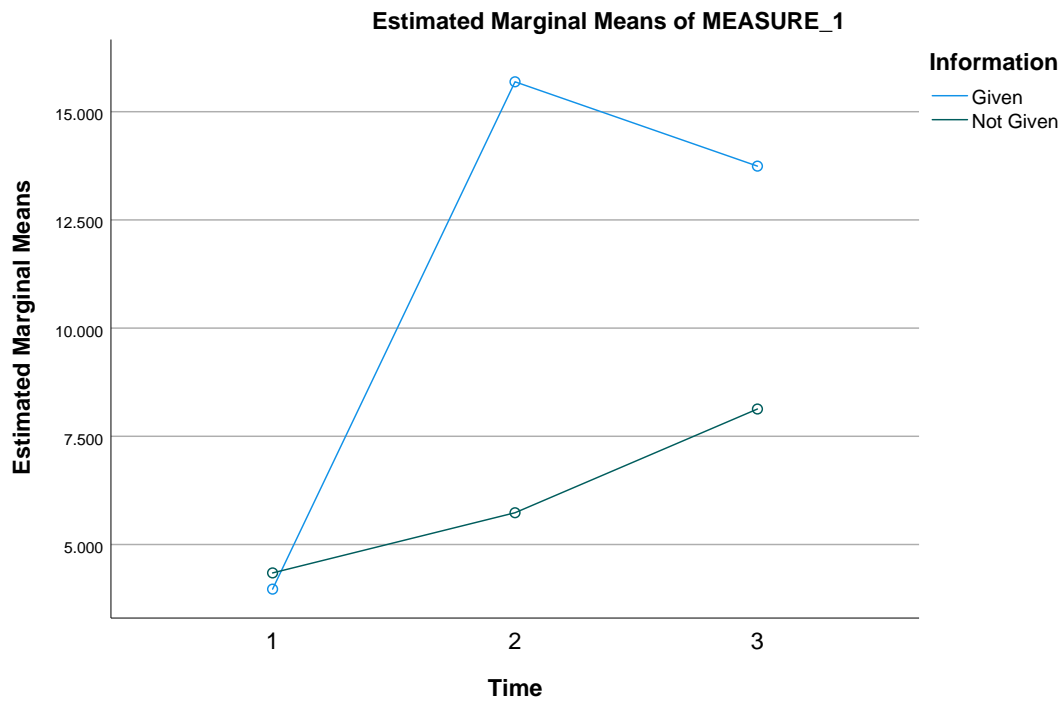| Information	Time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Given	1	3.968	1.271	1.437	6.500
	2	15.691	2.411	10.889	20.494
	3	13.743	2.889	7.989	19.497
Not Given	1	4.343	1.271	1.812	6.874
	2	5.734	2.411	.931	10.536
	3	8.131	2.889	2.377	13.885

8. Task * Information * Time

Measure: MEASURE_1

Task	Information	Time	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Book Task	Given	1	2.908	1.797	-.672	6.487
		2	10.864	3.410	4.073	17.656
		3	5.464	4.086	-2.673	13.601
	Not Given	1	3.336	1.797	-.243	6.916
		2	3.690	3.410	-3.102	10.481
		3	8.545	4.086	.408	16.683
No Task	Given	1	5.029	1.797	1.450	8.609
		2	20.518	3.410	13.726	27.310
		3	22.021	4.086	13.884	30.159
	Not Given	1	5.350	1.797	1.770	8.929
		2	7.778	3.410	.986	14.569
		3	7.716	4.086	-.422	15.853

Profile Plots

Estimated Marginal Means of MEASURE_1

Estimated Marginal Means of MEASURE_1

Estimated Marginal Means of MEASURE_1

Estimated Marginal Means of MEASURE_1

Estimated Marginal Means of MEASURE_1

Time * Information * Task

Estimated Marginal Means of MEASURE_1

at Task = Book Task

Estimated Marginal Means of MEASURE_1

at Task = No Task