Items Picked

[DataSet1] D:\Acads\mtp\Data_Analsysis\Anova analysis\Complete Data.sav

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	ItemsPickedBeforeEarthquake
2	ItemsPickedDuringEarthquake
3	ItemsPickedAfterEarthquake

Between-Subjects Factors

		N
Task	Book Task	40
	No Task	34
Information	Given	38
	Not Given	36

Descriptive Statistics

	Task	Information	Mean	Std. Deviation	N
ItemsPickedBeforeEarthquake	Book Task	Given	4.50	2.090	20
		Not Given	4.80	2.191	20
		Total	4.65	2.119	40
	No Task	Given	4.78	3.021	18
		Not Given	4.56	3.010	16
		Total	4.68	2.972	34
	Total	Given	4.63	2.541	38
		Not Given	4.69	2.550	36
		Total	4.66	2.528	74
ItemsPickedDuringEarthquake	Book Task	Given	2.55	3.236	20
		Not Given	4.10	2.713	20
		Total	3.33	3.050	40
	No Task	Given	1.50	2.093	18
		Not Given	2.50	2.683	16
		Total	1.97	2.406	34
	Total	Given	2.05	2.770	38
		Not Given	3.39	2.780	36
		Total	2.70	2.837	74
ItemsPickedAfterEarthquake	Book Task	Given	6.65	2.601	20
		Not Given	6.20	4.697	20
		Total	6.43	3.755	40
	No Task	Given	9.72	8.358	18
		Not Given	7.69	4.840	16
		Total	8.76	6.907	34
	Total	Given	8.11	6.163	38
		Not Given	6.86	4.752	36
		Total	7.50	5.520	74

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

Box's M	45.320
F	2.318
df1	18
df2	16056.615
Sig.	.001

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	.454	28.721[b]	2.000	69.000
	Wilks' Lambda	.546	28.721[b]	2.000	69.000
	Hotelling's Trace	.832	28.721[b]	2.000	69.000
	Roy's Largest Root	.832	28.721[b]	2.000	69.000
Time * Task	Pillai's Trace	.099	3.783[b]	2.000	69.000
	Wilks' Lambda	.901	3.783[b]	2.000	69.000
	Hotelling's Trace	.110	3.783[b]	2.000	69.000
	Roy's Largest Root	.110	3.783[b]	2.000	69.000
Time * Information	Pillai's Trace	.057	2.081[b]	2.000	69.000
	Wilks' Lambda	.943	2.081[b]	2.000	69.000
	Hotelling's Trace	.060	2.081[b]	2.000	69.000
	Roy's Largest Root	.060	2.081[b]	2.000	69.000
Time * Task * Information	Pillai's Trace	.003	.110[b]	2.000	69.000
	Wilks' Lambda	.997	.110[b]	2.000	69.000
	Hotelling's Trace	.003	.110[b]	2.000	69.000
	Roy's Largest Root	.003	.110[b]	2.000	69.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Time	Pillai's Trace	.000	.454	57.442
	Wilks' Lambda	.000	.454	57.442
	Hotelling's Trace	.000	.454	57.442
	Roy's Largest Root	.000	.454	57.442
Time * Task	Pillai's Trace	.028	.099	7.565
	Wilks' Lambda	.028	.099	7.565
	Hotelling's Trace	.028	.099	7.565
	Roy's Largest Root	.028	.099	7.565
Time * Information	Pillai's Trace	.133	.057	4.162
	Wilks' Lambda	.133	.057	4.162
	Hotelling's Trace	.133	.057	4.162
	Roy's Largest Root	.133	.057	4.162
Time * Task * Information	Pillai's Trace	.896	.003	.220
	Wilks' Lambda	.896	.003	.220
	Hotelling's Trace	.896	.003	.220
	Roy's Largest Root	.896	.003	.220

Multivariate Tests[a]

Effect		Observed Power[c]
Time	Pillai's Trace	1.000
	Wilks' Lambda	1.000
	Hotelling's Trace	1.000
	Roy's Largest Root	1.000
Time * Task	Pillai's Trace	.671
	Wilks' Lambda	.671
	Hotelling's Trace	.671
	Roy's Largest Root	.671
Time * Information	Pillai's Trace	.414
	Wilks' Lambda	.414
	Hotelling's Trace	.414
	Roy's Largest Root	.414
Time * Task * Information	Pillai's Trace	.066
	Wilks' Lambda	.066
	Hotelling's Trace	.066
	Roy's Largest Root	.066

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	.679	26.691	2	.000	.757

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Time	.803	.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	891.817	2	445.909	40.617
	Greenhouse-Geisser	891.817	1.514	588.953	40.617
	Huynh-Feldt	891.817	1.607	554.972	40.617
	Lower-bound	891.817	1.000	891.817	40.617
Time * Task	Sphericity Assumed	121.747	2	60.874	5.545
	Greenhouse-Geisser	121.747	1.514	80.402	5.545
	Huynh-Feldt	121.747	1.607	75.763	5.545
	Lower-bound	121.747	1.000	121.747	5.545
Time * Information	Sphericity Assumed	58.132	2	29.066	2.648
	Greenhouse-Geisser	58.132	1.514	38.390	2.648
	Huynh-Feldt	58.132	1.607	36.175	2.648
	Lower-bound	58.132	1.000	58.132	2.648
Time * Task * Information	Sphericity Assumed	3.387	2	1.693	.154
	Greenhouse-Geisser	3.387	1.514	2.237	.154
	Huynh-Feldt	3.387	1.607	2.108	.154
	Lower-bound	3.387	1.000	3.387	.154
Error(Time)	Sphericity Assumed	1536.964	140	10.978	
	Greenhouse-Geisser	1536.964	105.997	14.500	
	Huynh-Feldt	1536.964	112.487	13.663	
	Lower-bound	1536.964	70.000	21.957	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Time	Sphericity Assumed	.000	.367	81.234
	Greenhouse-Geisser	.000	.367	61.504
	Huynh-Feldt	.000	.367	65.270
	Lower-bound	.000	.367	40.617
Time * Task	Sphericity Assumed	.005	.073	11.090
	Greenhouse-Geisser	.010	.073	8.396
	Huynh-Feldt	.009	.073	8.910
	Lower-bound	.021	.073	5.545
Time * Information	Sphericity Assumed	.074	.036	5.295
	Greenhouse-Geisser	.090	.036	4.009
	Huynh-Feldt	.087	.036	4.255
	Lower-bound	.108	.036	2.648
Time * Task * Information	Sphericity Assumed	.857	.002	.309
	Greenhouse-Geisser	.797	.002	.234
	Huynh-Feldt	.811	.002	.248
	Lower-bound	.696	.002	.154
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	1.000
	Greenhouse-Geisser	1.000
	Huynh-Feldt	1.000
	Lower-bound	1.000
Time * Task	Sphericity Assumed	.848
	Greenhouse-Geisser	.767
	Huynh-Feldt	.785
	Lower-bound	.641
Time * Information	Sphericity Assumed	.519
	Greenhouse-Geisser	.447
	Huynh-Feldt	.462
	Lower-bound	.361
Time * Task * Information	Sphericity Assumed	.073
	Greenhouse-Geisser	.071
	Huynh-Feldt	.071
	Lower-bound	.067
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	309.580	1	309.580	26.299
	Quadratic	582.237	1	582.237	57.167
Time * Task	Linear	46.835	1	46.835	3.979
	Quadratic	74.912	1	74.912	7.355
Time * Information	Linear	15.138	1	15.138	1.286
	Quadratic	42.994	1	42.994	4.221
Time * Task * Information	Linear	2.623	1	2.623	.223
	Quadratic	.764	1	.764	.075
Error(Time)	Linear	824.022	70	11.772	
	Quadratic	712.942	70	10.185	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Time	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Time	Linear	.000	.273	26.299	.999
	Quadratic	.000	.450	57.167	1.000
Time * Task	Linear	.050	.054	3.979	.503
	Quadratic	.008	.095	7.355	.763
Time * Information	Linear	.261	.018	1.286	.201
	Quadratic	.044	.057	4.221	.526
Time * Task * Information	Linear	.638	.003	.223	.075
	Quadratic	.785	.001	.075	.058
Error(Time)	Linear				
	Quadratic				

a. Computed using alpha = .05

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

		Levene Statistic	df1	df2	Sig.
ItemsPickedBeforeEarthquake	Based on Mean	1.491	3	70	.224
	Based on Median	.874	3	70	.459
	Based on Median and with adjusted df	.874	3	54.957	.460
	Based on trimmed mean	1.458	3	70	.234
ItemsPickedDuringEarthquake	Based on Mean	.806	3	70	.495
	Based on Median	.604	3	70	.614
	Based on Median and with adjusted df	.604	3	63.442	.615
	Based on trimmed mean	.738	3	70	.533
ItemsPickedAfterEarthquake	Based on Mean	4.152	3	70	.009
	Based on Median	2.639	3	70	.056
	Based on Median and with adjusted df	2.639	3	41.024	.062
	Based on trimmed mean	3.747	3	70	.015

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	5420.946	1	5420.946	246.995	.000	.779
Task	5.813	1	5.813	.265	.608	.004
Information	.034	1	.034	.002	.969	.000
Task * Information	10.735	1	10.735	.489	.487	.007
Error	1536.333	70	21.948			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	246.995	1.000
Task	.265	.080
Information	.002	.050
Task * Information	.489	.106
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
4.963	.316	4.333	5.592

2. Task

Estimates

Measure: MEASURE_1

Task	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Book Task	4.800	.428	3.947	5.653
No Task	5.125	.465	4.198	6.052

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	-.325	.632	.608	-1.585	.935
No Task	Book Task	.325	.632	.608	-.935	1.585

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	1.938	1	1.938	.265	.608	.004
Error	512.111	70	7.316			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	.265	.080
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	4.950	.439	4.074	5.826
Not Given	4.975	.454	4.070	5.880

Pairwise Comparisons

Measure: MEASURE_1

					95% Confidence Interval for Difference[a]	
(I) Information	(J) Information	Mean Difference (I-J)	Std. Error	Sig.[a]	Lower Bound	Upper Bound
Given	Not Given	-.025	.632	.969	-1.285	1.235
Not Given	Given	.025	.632	.969	-1.235	1.285

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	.011	1	.011	.002	.969	.000
Error	512.111	70	7.316			

Univariate Tests

Measure: MEASURE_1

	Noncent. Parameter	Observed Power[a]
Contrast	.002	.050
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	4.660	.301	4.060	5.260
2	2.663	.319	2.027	3.298
3	7.565	.637	6.294	8.836

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	1.998*	.378	.000	1.071	2.925
	3	-2.905*	.566	.000	-4.294	-1.515
2	1	-1.998*	.378	.000	-2.925	-1.071
	3	-4.902*	.659	.000	-6.518	-3.287
3	1	2.905*	.566	.000	1.515	4.294
	2	4.902*	.659	.000	3.287	6.518

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	.454	28.721[a]	2.000	69.000	.000	.454
Wilks' lambda	.546	28.721[a]	2.000	69.000	.000	.454
Hotelling's trace	.832	28.721[a]	2.000	69.000	.000	.454
Roy's largest root	.832	28.721[a]	2.000	69.000	.000	.454

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	57.442	1.000
Wilks' lambda	57.442	1.000
Hotelling's trace	57.442	1.000
Roy's largest root	57.442	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

5. Task * Information

Measure: MEASURE_1

Task	Information	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Book Task	Given	4.567	.605	3.360	5.773
	Not Given	5.033	.605	3.827	6.240
No Task	Given	5.333	.638	4.062	6.605
	Not Given	4.917	.676	3.568	6.265

6. Task * Time

Measure: MEASURE_1

Task	Time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Book Task	1	4.650	.408	3.837	5.463
	2	3.325	.431	2.464	4.186
	3	6.425	.863	4.703	8.147
No Task	1	4.670	.443	3.787	5.553
	2	2.000	.469	1.065	2.935
	3	8.705	.938	6.834	10.576

7. Information * Time

Measure: MEASURE_1

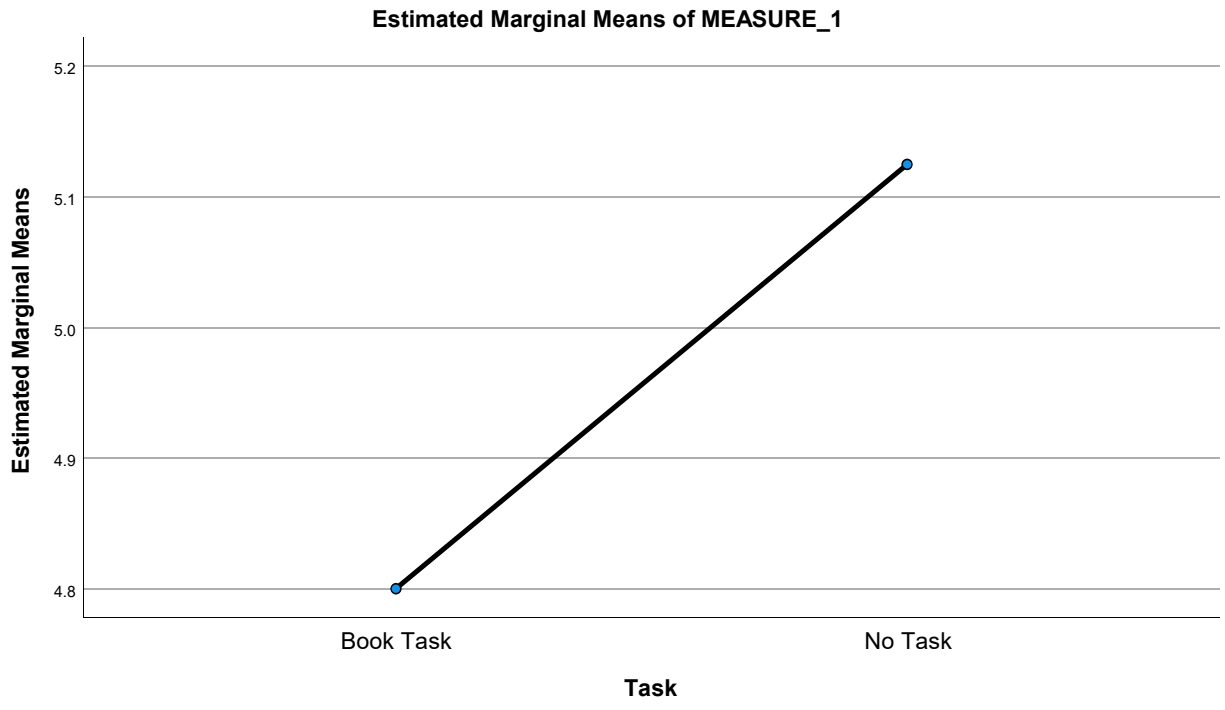
Information	Time	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Given	1	4.639	.419	3.804	5.474
	2	2.025	.443	1.141	2.909
	3	8.186	.887	6.417	9.955
Not Given	1	4.681	.432	3.819	5.544
	2	3.300	.458	2.387	4.213
	3	6.944	.916	5.118	8.770

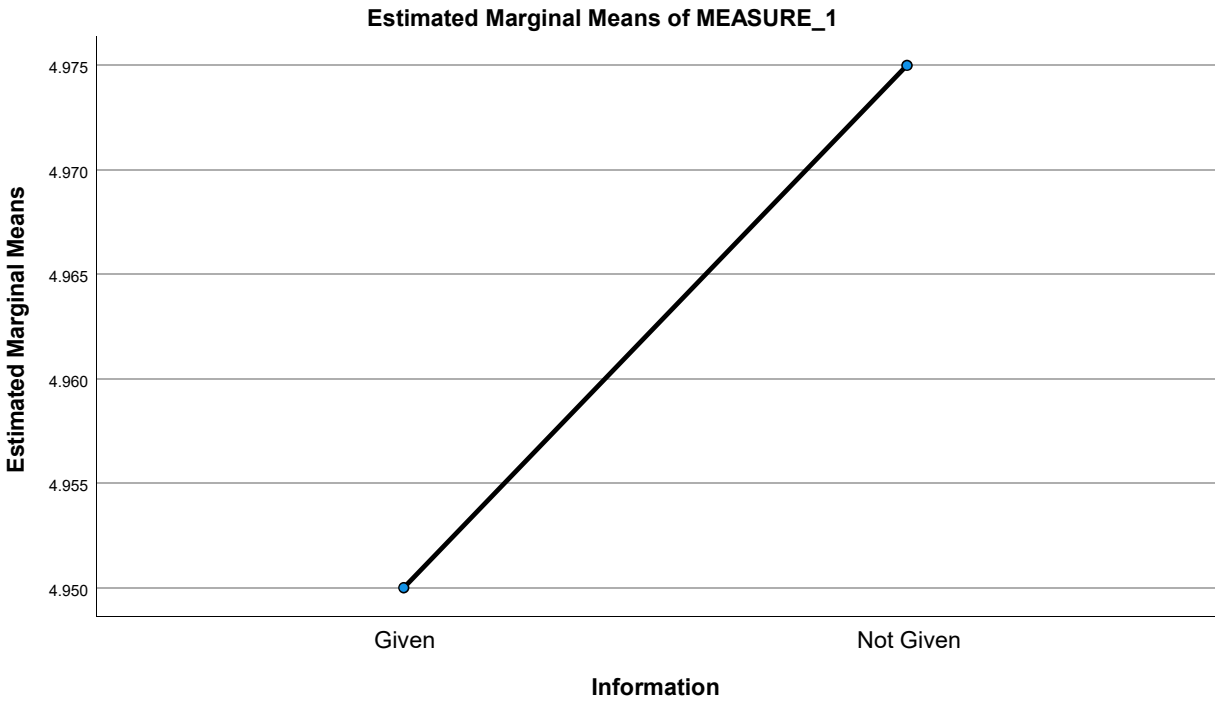
8. Task * Information * Time

Measure: MEASURE_1

Task	Information	Time	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Book Task	Given	1	4.500	.576	3.350	5.650
		2	2.550	.610	1.333	3.767
		3	6.650	1.221	4.215	9.085
	Not Given	1	4.800	.576	3.650	5.950
		2	4.100	.610	2.883	5.317
		3	6.200	1.221	3.765	8.635
No Task	Given	1	4.778	.608	3.566	5.990
		2	1.500	.643	.217	2.783
		3	9.722	1.287	7.156	12.289
	Not Given	1	4.563	.645	3.277	5.848
		2	2.500	.682	1.139	3.861
		3	7.688	1.365	4.965	10.410

Profile Plots

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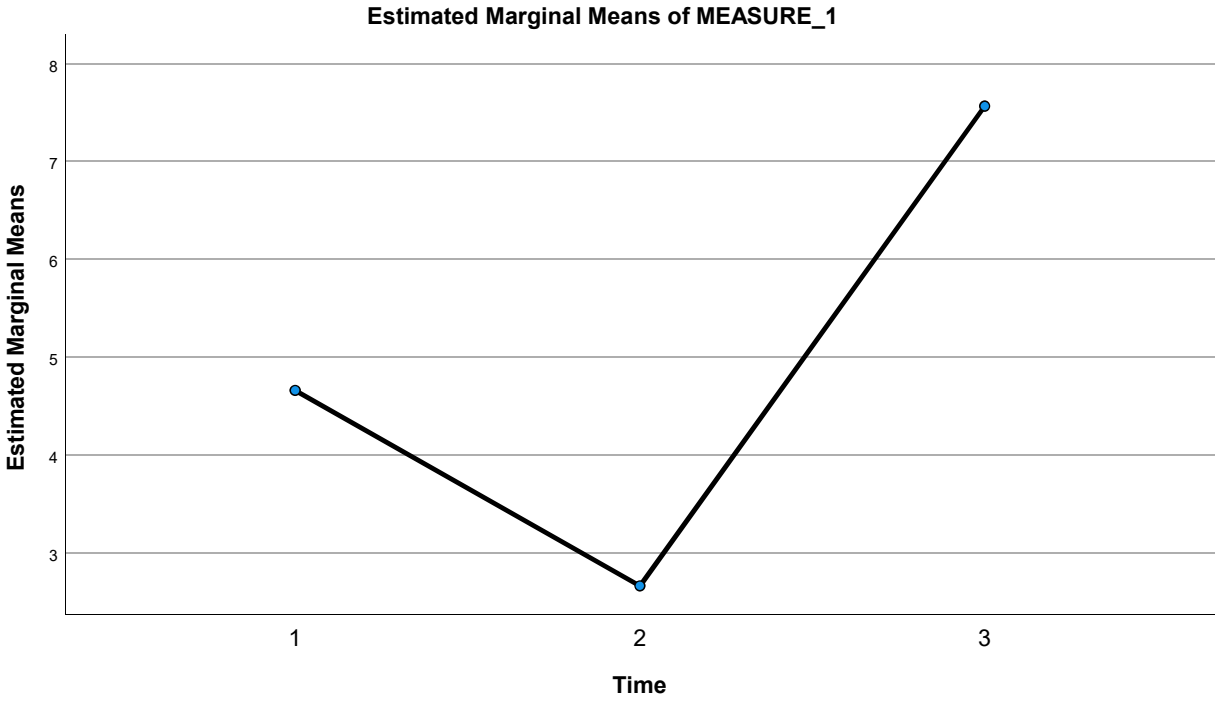
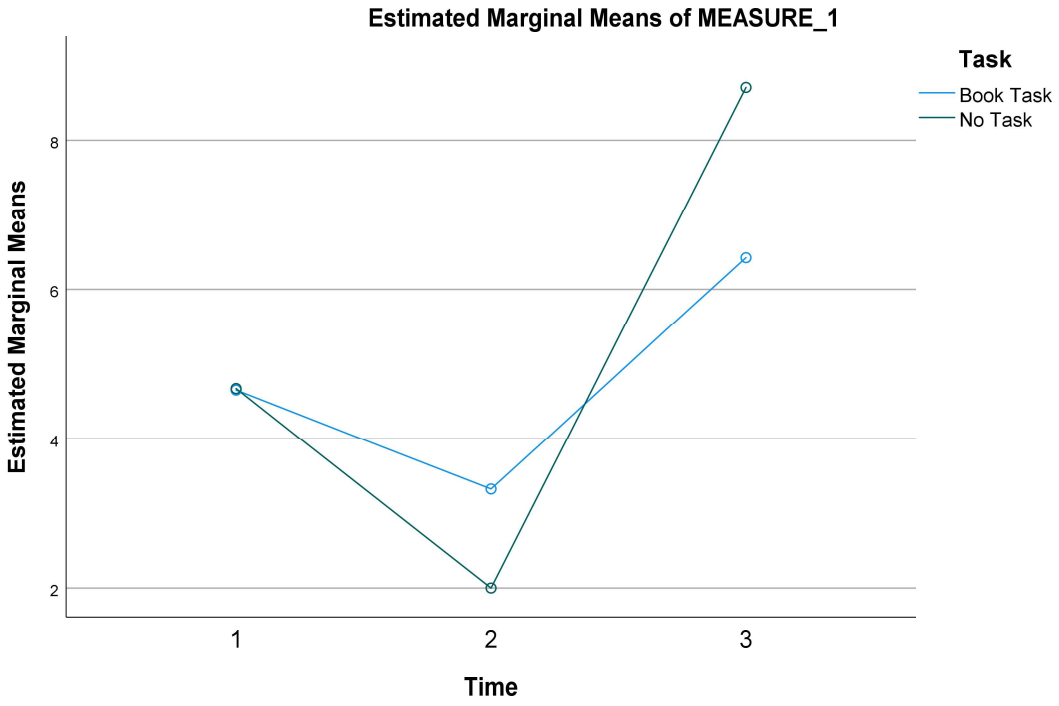
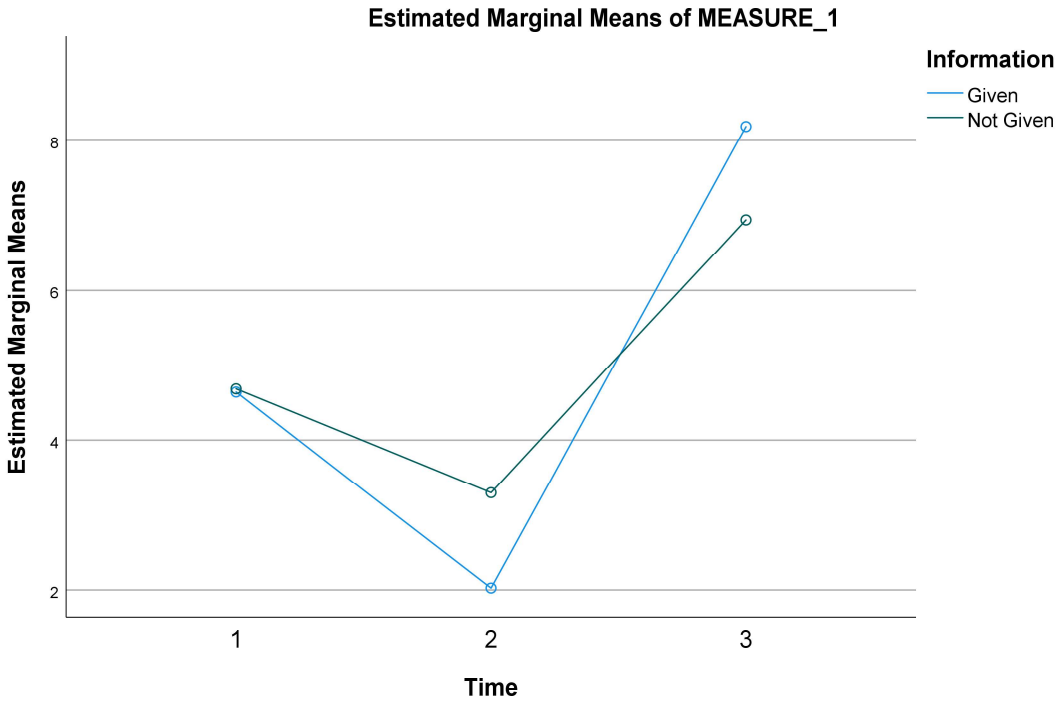
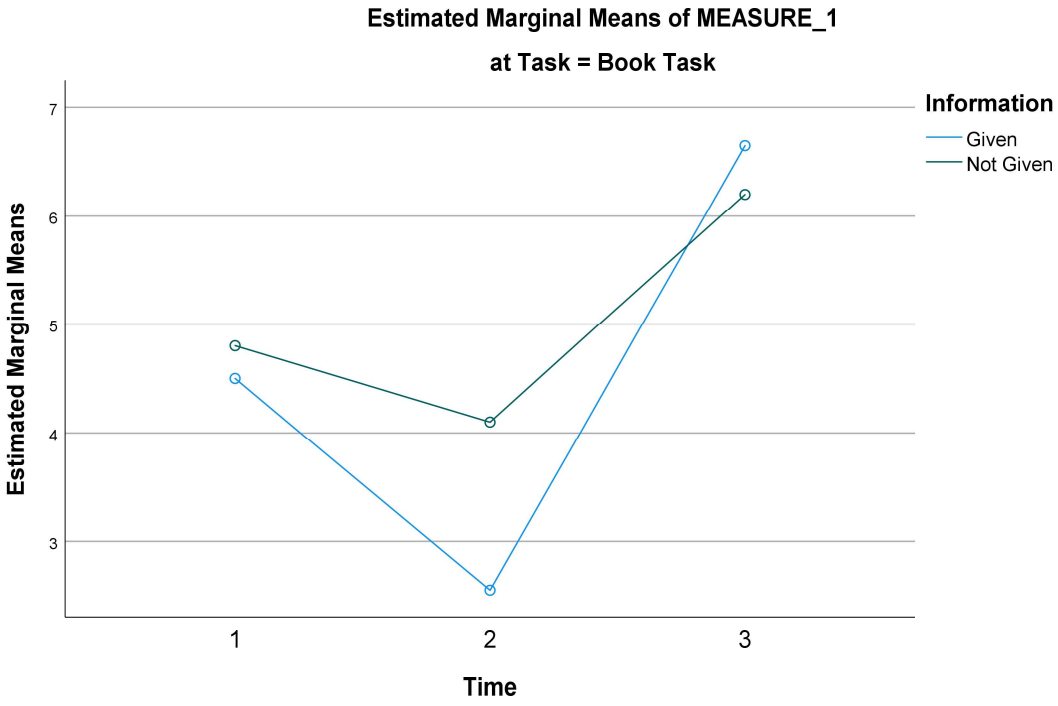
Estimated Marginal Means
4.975
4.970
4.965
4.960
4.955
4.950
Given
Not Given
Information

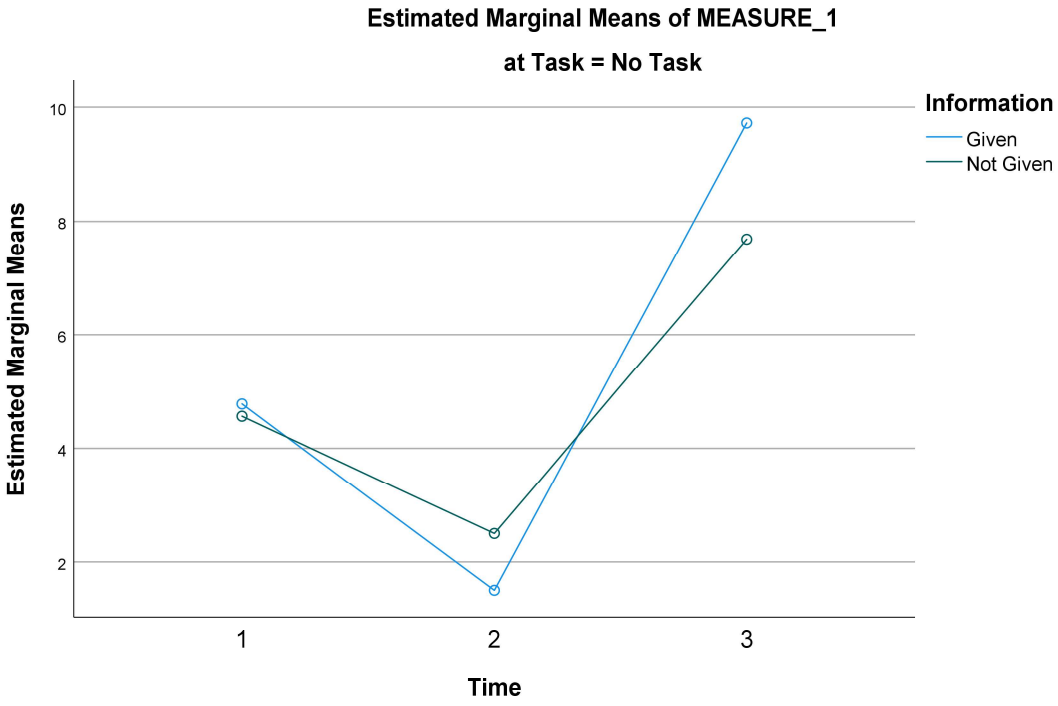

Estimated Marginal Means of MEASURE_1
Estimated Marginal Means
8
7
6
5
4
3
1
2
3
Time





Time * Information * Task


Estimated Marginal Means of MEASURE_1
at Task = Book Task
Information
Given
Not Given
Estimated Marginal Means
7
6
5
4
3
1
2
3
Time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at Task = No Task
Information
Given
Not Given
Estimated Marginal Means
10
8
6
4
2
1
2
3
Time