```
GLM Alpha_bi_beta_pre Alpha_bi_beta_during BY Task_1_Notask_0 Informed_1_noinformed_0
 /WSFACTOR=Time 2 Polynomial
 /METHOD=SSTYPE (3)
 /POSTHOC=Task 1 Notask 0 Informed 1 noinformed 0(TUKEY LSD BONFERRONI)
 /PLOT=PROFILE(Task 1 Notask_0*Informed_1_noinformed_0) TYPE=LINE ERRORBAR=NO MEANREFERE
NCE=NO
   YAXIS=AUTO
 /EMMEANS=TABLES (OVERALL)
 /EMMEANS=TABLES(Task 1 Notask 0) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Informed 1 noinformed 0) COMPARE ADJ(BONFERRONI)
 /EMMEANS=TABLES(Time) COMPARE ADJ(BONFERRONI)
 /EMMEANS=TABLES(Task 1 Notask 0*Informed 1 noinformed 0)
 /EMMEANS=TABLES(Task 1 Notask 0*Time)
 /EMMEANS=TABLES(Informed_1_noinformed_0*Time)
 /EMMEANS=TABLES(Task_1_Notask_0*Informed_1_noinformed_0*Time)
 /PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
 /CRITERIA=ALPHA(.05)
 /WSDESIGN=Time
  /DESIGN=Task_1_Notask_0 Informed_1_noinformed_0 Task_1_Notask_0*Informed_1_noinformed_0
```

General Linear Model

Warnings

Post hoc tests are not performed for Task_1_Notask_0 because there are fewer than three groups.

Post hoc tests are not performed for Informed_1_noinformed_0 because there are fewer than three groups.

Within-Subjects Factors

Measure: MEASURE_1

Dependent
Variable

1 Alpha_bi_bet
a_pre
2 Alpha_bi_bet
a_during

Between-Subjects Factors

		Value Label	N
Task_1_Notask_0	.00	No task	34
	1.00	task	40
Informed_1_noinformed_0	.00	not_informed	36
	1.00	Informed	38

Descriptive Statistics

	Tank 4 Natank 0	Informed 4 mainformed 0	Mean	Std. Deviation
	Task_1_Notask_0	Informed_1_noinformed_0		
Alpha_bi_beta_pre	No task	not_informed	.0992	.07457
		Informed	.0824	.10388
		Total	.0903	.09033
	task	not_informed	.0615	.03329
		Informed	.0754	.06674
		Total	.0684	.05253
	Total	not_informed	.0783	.05784
		Informed	.0787	.08519
		Total	.0785	.07268
Alpha_bi_beta_during	No task	not_informed	.0818	.08439
		Informed	.1012	.09432
		Total	.0921	.08898
	task	not_informed	.1309	.16762
		Informed	.1498	.17629
		Total	.1404	.17006
	Total	not_informed	.1091	.13754
		Informed	.1268	.14371
		Total	.1182	.14006

Descriptive Statistics

	Task_1_Notask_0	Informed_1_noinformed_0	N
Alpha_bi_beta_pre	No task	not_informed	16
		Informed	18
		Total	34
	task	not_informed	20
		Informed	20
		Total	40
	Total	not_informed	36
		Informed	38
		Total	74
Alpha_bi_beta_during	No task	not_informed	16
		Informed	18
		Total	34
	task	not_informed	20
		Informed	20
		Total	40
	Total	not_informed	36
		Informed	38
		Total	74

Box's Test of Equality of Covariance Matrices^a

Box's M	48.580
F	5.115
df1	9
df2	48529.783
Sig.	.000

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

a. Design: Intercept + Task_1_Notask_0 + Informed_1_noinformed_0 + Task_1_Notask_0 * Informed_1_noinformed_0Within Subjects Design: Time

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
Time	Pillai's Trace	.057	4.225 ^b	1.000	70.000
	Wilks' Lambda	.943	4.225 ^b	1.000	70.000
	Hotelling's Trace	.060	4.225 ^b	1.000	70.000
	Roy's Largest Root	.060	4.225 ^b	1.000	70.000
Time * Task_1_Notask_0	Pillai's Trace	.055	4.058 ^b	1.000	70.000
	Wilks' Lambda	.945	4.058 ^b	1.000	70.000
	Hotelling's Trace	.058	4.058 ^b	1.000	70.000
	Roy's Largest Root	.058	4.058 ^b	1.000	70.000
Time *	Pillai's Trace	.005	.339 ^b	1.000	70.000
Informed_1_noinformed_0	Wilks' Lambda	.995	.339 ^b	1.000	70.000
	Hotelling's Trace	.005	.339 ^b	1.000	70.000
	Roy's Largest Root	.005	.339 ^b	1.000	70.000
Time * Task_1_Notask_0 *	Pillai's Trace	.003	.194 ^b	1.000	70.000
Informed_1_noinformed_0	Wilks' Lambda	.997	.194 ^b	1.000	70.000
	Hotelling's Trace	.003	.194 ^b	1.000	70.000
	Roy's Largest Root	.003	.194 ^b	1.000	70.000

Multivariate Tests^a

Effect		Sig.	Partial Eta Squared
Time	Pillai's Trace	.044	.057
	Wilks' Lambda	.044	.057
	Hotelling's Trace	.044	.057
	Roy's Largest Root	.044	.057
Time * Task_1_Notask_0	Pillai's Trace	.048	.055
	Wilks' Lambda	.048	.055
	Hotelling's Trace	.048	.055
	Roy's Largest Root	.048	.055
Time *	Pillai's Trace	.562	.005
Informed_1_noinformed_0	Wilks' Lambda	.562	.005
	Hotelling's Trace	.562	.005
	Roy's Largest Root	.562	.005
Time * Task_1_Notask_0 *	Pillai's Trace	.661	.003
Informed_1_noinformed_0	Wilks' Lambda	.661	.003
	Hotelling's Trace	.661	.003
	Roy's Largest Root	.661	.003

a. Design: Intercept + Task_1_Notask_0 + Informed_1_noinformed_0 + Task_1_Notask_0 * Informed_1_noinformed_0Within Subjects Design: Time

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

					Epsilon ^b
Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser
Time	1.000	.000	0		1.000

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Epsilon^b

Within Subjects Effect	Huynh-Feldt	Lower-bound
Time	1.000	1.000

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_1_Notask_0 + Informed_1_noinformed_0 + Task_1_Notask_0 * Informed_1_noinformed_0Within 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

_		Type III Sum of			
Source		Squares	df	Mean Square	F
Time	Sphericity Assumed	.048	1	.048	4.225
	Greenhouse-Geisser	.048	1.000	.048	4.225
	Huynh-Feldt	.048	1.000	.048	4.225
	Lower-bound	.048	1.000	.048	4.225
Time * Task_1_Notask_0	Sphericity Assumed	.047	1	.047	4.058
	Greenhouse-Geisser	.047	1.000	.047	4.058
	Huynh-Feldt	.047	1.000	.047	4.058
	Lower-bound	.047	1.000	.047	4.058
Time *	Sphericity Assumed	.004	1	.004	.339
Informed_1_noinformed_0	Greenhouse-Geisser	.004	1.000	.004	.339
	Huynh-Feldt	.004	1.000	.004	.339
	Lower-bound	.004	1.000	.004	.339
Time * Task_1_Notask_0 *	Sphericity Assumed	.002	1	.002	.194
Informed_1_noinformed_0	Greenhouse-Geisser	.002	1.000	.002	.194
	Huynh-Feldt	.002	1.000	.002	.194
	Lower-bound	.002	1.000	.002	.194
Error(Time)	Sphericity Assumed	.802	70	.011	
	Greenhouse-Geisser	.802	70.000	.011	
	Huynh-Feldt	.802	70.000	.011	
	Lower-bound	.802	70.000	.011	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared
Time	Sphericity Assumed	.044	.057
	Greenhouse-Geisser	.044	.057
	Huynh-Feldt	.044	.057
	Lower-bound	.044	.057
Time * Task_1_Notask_0	Sphericity Assumed	.048	.055
	Greenhouse-Geisser	.048	.055
	Huynh-Feldt	.048	.055
	Lower-bound	.048	.055
Time *	Sphericity Assumed	.562	.005
Informed_1_noinformed_0	Greenhouse-Geisser	.562	.005
	Huynh-Feldt	.562	.005
	Lower-bound	.562	.005
Time * Task_1_Notask_0 *	Sphericity Assumed	.661	.003
Informed_1_noinformed_0	Greenhouse-Geisser	.661	.003
	Huynh-Feldt	.661	.003
	Lower-bound	.661	.003
Error(Time)	Sphericity Assumed		
	Greenhouse-Geisser		
	Huynh-Feldt		
	Lower-bound		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	.048	1	.048	4.225	.044
Time * Task_1_Notask_0	Linear	.047	1	.047	4.058	.048
Time * Informed_1_noinformed_0	Linear	.004	1	.004	.339	.562
Time * Task_1_Notask_0 * Informed_1_noinformed_0	Linear	.002	1	.002	.194	.661
Error(Time)	Linear	.802	70	.011		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Time	Partial Eta Squared
Time	Linear	.057
Time * Task_1_Notask_0	Linear	.055
Time * Informed_1_noinformed_0	Linear	.005
Time * Task_1_Notask_0 * Informed_1_noinformed_0	Linear	.003
Error(Time)	Linear	

Levene's Test of Equality of Error Variances^a

		Levene Statistic	df1	df2	Sig.
Alpha_bi_beta_pre	Based on Mean	2.625	3	70	.057
	Based on Median	1.244	3	70	.301
	Based on Median and with adjusted df	1.244	3	34.856	.309
	Based on trimmed mean	1.791	3	70	.157
Alpha_bi_beta_during	Based on Mean	1.397	3	70	.251
	Based on Median	.791	3	70	.503
	Based on Median and with adjusted df	.791	3	52.211	.504
	Based on trimmed mean	1.014	3	70	.392

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

a. Design: Intercept + Task_1_Notask_0 + Informed_1_noinformed_0 + Task_1_Notask_0 * Informed_1_noinformed_0
 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.
Intercept	1.404	1	1.404	103.157	.000
Task_1_Notask_0	.006	1	.006	.473	.494
Informed_1_noinformed_0	.003	1	.003	.211	.647
Task_1_Notask_0 * Informed_1_noinformed_0	.002	1	.002	.153	.697
Error	.952	70	.014		

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Partial Eta Squared
Intercept	.596
Task_1_Notask_0	.007
Informed_1_noinformed_0	.003
Task_1_Notask_0 * Informed_1_noinformed_0	.002
Error	

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

		95% Confidence Interval		
Mean	Std. Error	Lower Bound	Upper Bound	
.098	.010	.079	.117	

2. Task_1_Notask_0

Estimates

Measure: MEASURE_1

			95% Confidence Interval		
Task_1_Notask_0	Mean	Std. Error	Lower Bound	Upper Bound	
No task	.091	.014	.063	.119	
task	.104	.013	.078	.130	

Pairwise Comparisons

Measure: MEASURE_1

		Mean			95% Confidence ^a
(I) Task_1_Notask_0	(J) Task_1_Notask_0	Difference (I-J)	Std. Error	Sig. ^a	Lower Bound
No task	task	013	.019	.494	052
task	No task	.013	.019	.494	025

Pairwise Comparisons

Measure: MEASURE_1

95% Confidence Interval for ^a...

(I) Task_1_Notask_0	(J) Task_1_Notask_0	Upper Bound
No task	task	.025
task	No task	.052

Based on estimated marginal means

Univariate Tests

Measure: MEASURE_1

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	.003	1	.003	.473	.494	.007
Error	.476	70	.007			

The F tests the effect of Task_1_Notask_0. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

3. Informed_1_noinformed_0

a. Adjustment for multiple comparisons: Bonferroni.

Estimates

Measure: MEASURE_1

			95% Confidence Interval		
Informed_1_noinformed_0	Mean	Std. Error	Lower Bound	Upper Bound	
not_informed	.093	.014	.066	.121	
Informed	.102	.013	.076	.129	

Pairwise Comparisons

Measure: MEASURE_1

(I)	(J)	Mean		
Informed_1_noinformed_0	Informed_1_noinformed_0	Difference (I-J)	Std. Error	Sig. ^a
not_informed	Informed	009	.019	.647
Informed	not_informed	.009	.019	.647

Pairwise Comparisons

Measure: MEASURE_1

		95% Confidence Interval for Difference ^a	
(I) Informed_1_noinformed_0	(J) Informed_1_noinformed_0	Lower Bound	Upper Bound
not_informed	Informed	047	.030
Informed	not_informed	030	.047

Based on estimated marginal means

Univariate Tests

Measure: MEASURE_1

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	.001	1	.001	.211	.647	.003
Error	.476	70	.007			

The F tests the effect of Informed_1_noinformed_0. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

4. Time

a. Adjustment for multiple comparisons: Bonferroni.

Estimates

Measure: MEASURE_1

			95% Confidence Interval		
Time	Mean	Std. Error	Lower Bound	Upper Bound	
1	.080	.009	.063	.097	
2	.116	.016	.083	.149	

Pairwise Comparisons

Measure: MEASURE_1

					95% Confidence Interval for Difference ^b	
		Mean				
(I) Time	(J) Time	Difference (I-J)	Std. Error	Sig. ^b	Lower Bound	Upper Bound
1	2	036 [*]	.018	.044	072	001
2	1	.036*	.018	.044	.001	.072

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	.057	4.225 ^a	1.000	70.000	.044	.057
Wilks' lambda	.943	4.225 ^a	1.000	70.000	.044	.057
Hotelling's trace	.060	4.225 ^a	1.000	70.000	.044	.057
Roy's largest root	.060	4.225 ^a	1.000	70.000	.044	.057

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

5. Task_1_Notask_0 * Informed_1_noinformed_0

Measure: MEASURE_1

				95% Confidence Interval		
Task_1_Notask_0	Informed_1_noinformed_0	Mean	Std. Error	Lower Bound	Upper Bound	
No task	not_informed	.091	.021	.049	.132	
	Informed	.092	.019	.053	.131	
task	not_informed	.096	.018	.059	.133	
	Informed	.113	.018	.076	.149	

6. Task_1_Notask_0 * Time

Measure: MEASURE_1

				95% Confidence Interval		
Task_1_Notask_0	Time	Mean	Std. Error	Lower Bound	Upper Bound	
No task	1	.091	.013	.066	.116	
	2	.092	.024	.043	.140	
task	1	.068	.012	.045	.091	
	2	.140	.022	.096	.185	

7. Informed_1_noinformed_0 * Time

Measure: MEASURE_1

				95% Confidence Interval		
Informed_1_noinformed_0	Time	Mean	Std. Error	Lower Bound	Upper Bound	
not_informed	1	.080	.012	.056	.105	
	2	.106	.024	.059	.153	
Informed	1	.079	.012	.055	.103	
	2	.126	.023	.080	.171	

8. Task_1_Notask_0 * Informed_1_noinformed_0 * Time

Measure: MEASURE_1

					95%
Task_1_Notask_0	Informed_1_noinformed_0	Time	Mean	Std. Error	Lower Bound
No task	not_informed	_1	.099	.018	.063
		2	.082	.035	.012
	Informed	1	.082	.017	.048
		2	.101	.033	.035
task	not_informed	1	.062	.016	.029
		2	.131	.031	.068
	Informed	1	.075	.016	.043
		2	.150	.031	.087

8. Task_1_Notask_0 * Informed_1_noinformed_0 * Time

Measure: MEASURE_1

95% Confidence.

Task_1_Notask_0	Informed_1_noinformed_0	Time	Upper Bound
No task	not_informed	1	.136
		2	.152
	Informed	1	.117
		2	.167
task	not_informed	1	.094
		2	.194
	Informed	1	.108
		2	.213

Profile Plots

