

GET

FILE='C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsMeans.sav'.

DATASET NAME DataSet1 WINDOW=FRONT.

GLM EyeHand EyeAlone EyeCursor

/WSFACTOR=Condition 3 Polynomial

/MEASURE=MeanFixationError

/METHOD=SSTYPE(3)

/PLOT=PROFILE(Condition)

/EMMEANS=TABLES(Condition) COMPARE ADJ(BONFERRONI)

/PRINT=DESCRIPTIVE ETASQ

/CRITERIA=ALPHA(.05)

/WSDESIGN=Condition.

## General Linear Model

### Notes

Output Created	21-JUL-2020 14:08:25	
Comments		
Input	Data	C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsMeans.sav
	Active Dataset	DataSet1
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	Split File	<none>
	N of Rows in Working Data File	7
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM EyeHand EyeAlone EyeCursor /WSFACTOR=Condition 3 Polynomial /MEASURE=MeanFixationError /METHOD=SSTYPE(3) /PLOT=PROFILE(Condition) /EMMEANS=TABLES(Condition) COMPARE ADJ(BONFERRONI) /PRINT=DESCRIPTIVE ETASQ /CRITERIA=ALPHA(.05) /WSDESIGN=Condition.	

### Notes

Resources	Processor Time	00:00:01.66
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[DataSet1] C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsMeans.sav

### Within-Subjects Factors

Measure: MeanFixationError

Condition	Dependent Variable
1	EyeHand
2	EyeAlone
3	EyeCursor

### Descriptive Statistics

	Mean	Std. Deviation	N
EyeHand	2.5960	1.29907	7
EyeAlone	2.3793	1.52721	7
EyeCursor	1.0429	.40476	7

### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Condition	Pillai's Trace	.759	7.878 <sup>b</sup>	2.000	5.000	.028	.759
	Wilks' Lambda	.241	7.878 <sup>b</sup>	2.000	5.000	.028	.759
	Hotelling's Trace	3.151	7.878 <sup>b</sup>	2.000	5.000	.028	.759
	Roy's Largest Root	3.151	7.878 <sup>b</sup>	2.000	5.000	.028	.759

a. Design: Intercept  
Within Subjects Design: Condition

b. Exact statistic

### Mauchly's Test of Sphericity<sup>a</sup>

Measure: MeanFixationError

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon <sup>b</sup>		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Condition	.404	4.535	2	.104	.626	.713	.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

Within Subjects Design: Condition

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: MeanFixationError

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Condition	Sphericity Assumed	9.906	2	4.953	10.126	.003	.628
	Greenhouse-Geisser	9.906	1.253	7.906	10.126	.011	.628
	Huynh-Feldt	9.906	1.426	6.945	10.126	.008	.628
	Lower-bound	9.906	1.000	9.906	10.126	.019	.628
Error(Condition)	Sphericity Assumed	5.869	12	.489			
	Greenhouse-Geisser	5.869	7.518	.781			
	Huynh-Feldt	5.869	8.557	.686			
	Lower-bound	5.869	6.000	.978			

### Tests of Within-Subjects Contrasts

Measure: MeanFixationError

Source	Condition	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Condition	Linear	8.443	1	8.443	15.475	.008	.721
	Quadratic	1.463	1	1.463	3.381	.116	.360
Error(Condition)	Linear	3.273	6	.546			
	Quadratic	2.596	6	.433			

### Tests of Between-Subjects Effects

Measure: MeanFixationError

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	84.509	1	84.509	26.363	.002	.815
Error	19.233	6	3.206			

## Estimated Marginal Means

## Condition

### Estimates

Measure: MeanFixationError

Condition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	2.596	.491	1.395	3.797
2	2.379	.577	.967	3.792
3	1.043	.153	.669	1.417

### Pairwise Comparisons

Measure: MeanFixationError

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	.217	.198	.948	-.435	.868
	3	1.553 <sup>*</sup>	.395	.023	.255	2.851
2	1	-.217	.198	.948	-.868	.435
	3	1.336	.473	.091	-.220	2.893
3	1	-1.553 <sup>*</sup>	.395	.023	-2.851	-.255
	2	-1.336	.473	.091	-2.893	.220

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

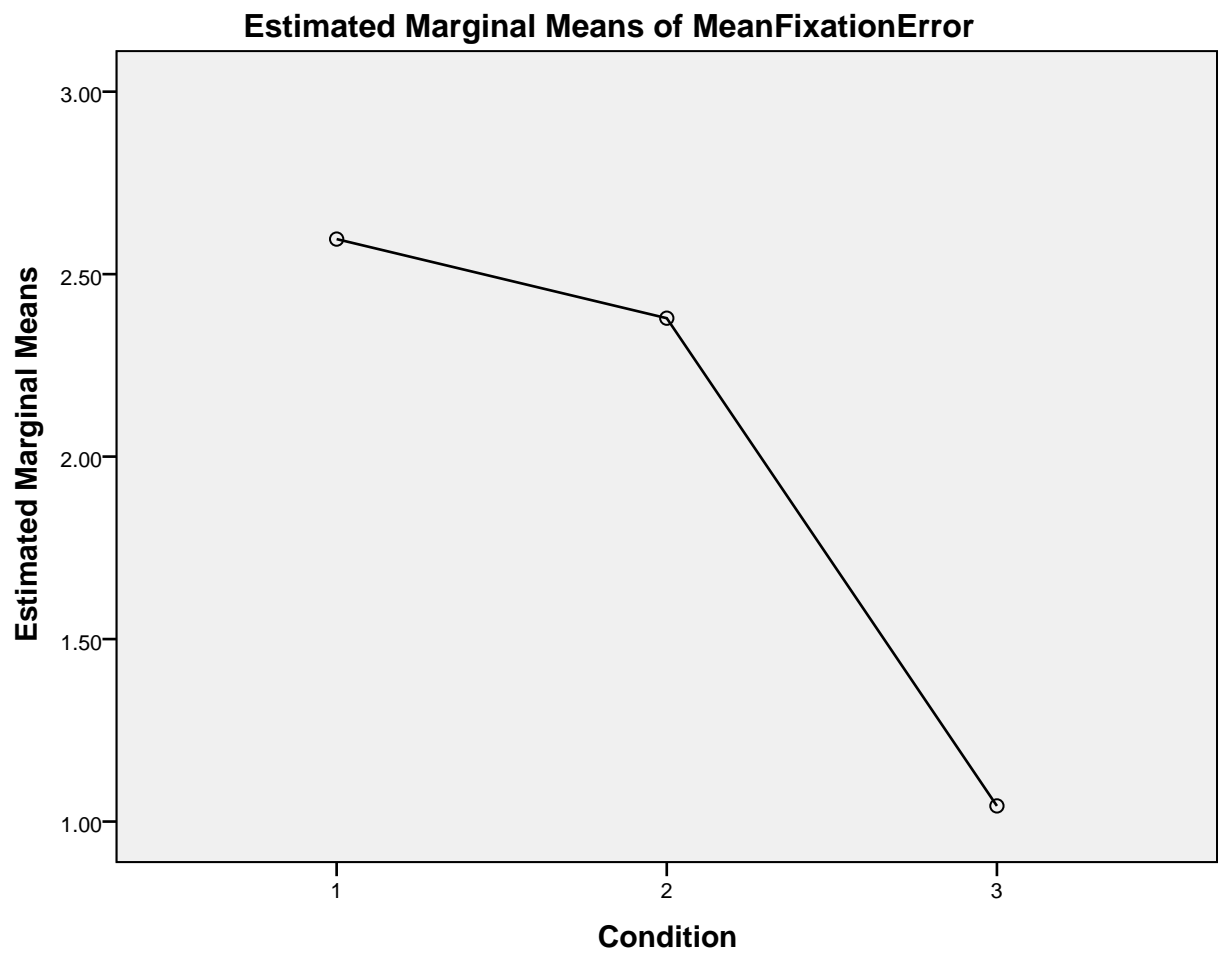
### Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.759	7.878 <sup>a</sup>	2.000	5.000	.028	.759
Wilks' lambda	.241	7.878 <sup>a</sup>	2.000	5.000	.028	.759
Hotelling's trace	3.151	7.878 <sup>a</sup>	2.000	5.000	.028	.759
Roy's largest root	3.151	7.878 <sup>a</sup>	2.000	5.000	.028	.759

Each F tests the multivariate effect of Condition. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic

## Profile Plots



```
T-TEST PAIRS=EyeHand WITH EyeAlone (PAIRED)  
/CRITERIA=CI(.9500)  
/MISSING=ANALYSIS.
```

## T-Test

### Notes

Output Created	21-JUL-2020 14:08:55	
Comments		
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	Split File	<none>
	N of Rows in Working Data File	7
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax	T-TEST PAIRS=EyeHand WITH EyeAlone (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EyeHand	2.5960	7	1.29907	.49100
	EyeAlone	2.3793	7	1.52721	.57723

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	EyeHand & EyeAlone	7	.944	.001

### Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Mean	Std. Deviation			
Pair 1	EyeHand - EyeAlone	.21671	.52435	.19819	-.26823	.70166	1.093	6	.316

T-TEST PAIRS=EyeHand WITH EyeCursor (PAIRED)

/CRITERIA=CI(.9500)

/MISSING=ANALYSIS.

## T-Test

### Notes

Output Created	21-JUL-2020 14:09:13	
Comments		
Input	Data	C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsMeans.sav
	Active Dataset	DataSet1
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	N of Rows in Working Data File	7
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax	T-TEST PAIRS=EyeHand WITH EyeCursor (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EyeHand	2.5960	7	1.29907	.49100
	EyeCursor	1.0429	7	.40476	.15298

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	EyeHand & EyeCursor	7	.723	.066

**Paired Samples Test**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	EyeHand - EyeCursor	1.55314	1.04458	.39481	.58707	2.51922	3.934	6	.008

```
T-TEST PAIRS=EyeAlone WITH EyeCursor (PAIRED)
/CRITERIA=CI(.9500)
/MISSING=ANALYSIS.
```

## T-Test

**Notes**

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Comments	
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	DataSet1
	Filter
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	Split File
	<none>
	N of Rows in Working Data File
	7
Missing Value Handling	Definition of Missing
	User defined missing values are treated as missing.
	Cases Used
	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax	T-TEST PAIRS=EyeAlone WITH EyeCursor (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time
	00:00:00.00
	Elapsed Time
	00:00:00.00

**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 EyeAlone	2.3793	7	1.52721	.57723
EyeCursor	1.0429	7	.40476	.15298



### Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 EyeAlone & EyeCursor	7	.750	.052

### Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	EyeAlone - EyeCursor	1.33643	1.25242	.47337	.17813	2.49473	2.823	6	.030