

GET

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

DATASET NAME DataSet2 WINDOW=FRONT.

GLM EyeHand EyeAlone EyeCursor

/WSFACTOR=Condition 3 Polynomial

/MEASURE=StdDevFixationError

/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 14:12:23	
Comments		
Input	Data	C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsStdDevs.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	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=StdDevFixationError /METHOD=SSTYPE(3) /PLOT=PROFILE(Condition) /EMMEANS=TABLES(Condition) COMPARE ADJ(BONFERRONI) /PRINT=DESCRIPTIVE ETASQ /CRITERIA=ALPHA(.05) /WSDESIGN=Condition.	

### Notes

Resources	Processor Time	00:00:00.27
	Elapsed Time	00:00:00.11

[DataSet2] C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsStdDevs.sav

### Within-Subjects Factors

Measure: StdDevFixationError

Condition	Dependent Variable
1	EyeHand
2	EyeAlone
3	EyeCursor

### Descriptive Statistics

	Mean	Std. Deviation	N
EyeHand	.9873	.48276	7
EyeAlone	.8926	.54763	7
EyeCursor	.6744	.25436	7

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

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Condition	Pillai's Trace	.481	2.320 <sup>b</sup>	2.000	5.000	.194	.481
	Wilks' Lambda	.519	2.320 <sup>b</sup>	2.000	5.000	.194	.481
	Hotelling's Trace	.928	2.320 <sup>b</sup>	2.000	5.000	.194	.481
	Roy's Largest Root	.928	2.320 <sup>b</sup>	2.000	5.000	.194	.481

a. Design: Intercept  
Within Subjects Design: Condition

b. Exact statistic

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

Measure: StdDevFixationError

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon <sup>b</sup>		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Condition	.831	.928	2	.629	.855	1.000	.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: StdDevFixationError

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Condition	Sphericity Assumed	.360	2	.180	3.394	.068	.361
	Greenhouse-Geisser	.360	1.710	.211	3.394	.079	.361
	Huynh-Feldt	.360	2.000	.180	3.394	.068	.361
	Lower-bound	.360	1.000	.360	3.394	.115	.361
Error(Condition)	Sphericity Assumed	.637	12	.053			
	Greenhouse-Geisser	.637	10.262	.062			
	Huynh-Feldt	.637	12.000	.053			
	Lower-bound	.637	6.000	.106			

### Tests of Within-Subjects Contrasts

Measure: StdDevFixationError

Source	Condition	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Condition	Linear	.343	1	.343	5.495	.058	.478
	Quadratic	.018	1	.018	.406	.548	.063
Error(Condition)	Linear	.374	6	.062			
	Quadratic	.263	6	.044			

### Tests of Between-Subjects Effects

Measure: StdDevFixationError

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	15.224	1	15.224	30.974	.001	.838
Error	2.949	6	.491			

## Estimated Marginal Means

## Condition

### Estimates

Measure: StdDevFixationError

Condition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	.987	.182	.541	1.434
2	.893	.207	.386	1.399
3	.674	.096	.439	.910

### Pairwise Comparisons

Measure: StdDevFixationError

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
1	2	.095	.095	1.000	-.216	.406
	3	.313	.133	.173	-.126	.752
2	1	-.095	.095	1.000	-.406	.216
	3	.218	.137	.486	-.232	.668
3	1	-.313	.133	.173	-.752	.126
	2	-.218	.137	.486	-.668	.232

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

### Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.481	2.320 <sup>a</sup>	2.000	5.000	.194	.481
Wilks' lambda	.519	2.320 <sup>a</sup>	2.000	5.000	.194	.481
Hotelling's trace	.928	2.320 <sup>a</sup>	2.000	5.000	.194	.481
Roy's largest root	.928	2.320 <sup>a</sup>	2.000	5.000	.194	.481

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 14:12:33	
Comments		
Input	Data	C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsStdDevs.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	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	.9873	7	.48276	.18247
	EyeAlone	.8926	7	.54763	.20699

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	EyeHand & EyeAlone	7	.890	.007

### Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Mean	Std. Deviation			
Pair 1	EyeHand - EyeAlone	.09471	.25026	.09459	-.13674	.32617	1.001	6	.355

T-TEST PAIRS=EyeHand WITH EyeCursor (PAIRED)

/CRITERIA=CI(.9500)

/MISSING=ANALYSIS.

## T-Test

### Notes

Output Created	21-JUL-2020 14:12:45	
Comments		
Input	Data	C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsStdDevs.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	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 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	.9873	7	.48276	.18247
	EyeCursor	.6744	7	.25436	.09614

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	EyeHand & EyeCursor	7	.705	.077

**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	.31286	.35311	.13346	-.01372	.63943	2.344	6	.058

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

## T-Test

**Notes**

Output Created	21-JUL-2020 14:13:03
Comments	
Input	Data
	C:\Users\Jack Schultz\Desktop\Eye Hand Coordination Experiment\Final Statistics\EyeFixationsStdDevs.sav
	Active Dataset
	DataSet2
	Filter
	<none>
	Weight
	<none>
	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	.8926	7	.54763	.20699
EyeCursor	.6744	7	.25436	.09614



### Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 EyeAlone & EyeCursor	7	.838	.019

### 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	.21814	.36218	.13689	-.11682	.55310	1.594	6	.162