General Linear Model

[DataSet1] D:\Adiss\24Column.sav

Within-Subjects Factors

Measure: keystrokes

system	Dependent Variable
1	VAR00001
2	VAR00002
3	VAR00003

Descriptive Statistics

	Mean	Std. Deviation	N
Chibipoint (crosshairs ONLY)	5.67	.492	12
Chibipoint (crosshairs AND flyouts)	3.00	.000	12
Tabbing	1.00	.000	12

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
system	Pillai's Trace	.990	1078.000[b]	1.000	11.000	.000
	Wilks' Lambda	.010	1078.000[b]	1.000	11.000	.000
	Hotelling's Trace	98.000	1078.000[b]	1.000	11.000	.000
	Roy's Largest Root	98.000	1078.000[b]	1.000	11.000	.000

Multivariate Tests[a]

Effect		Partial Eta Squared
system	Pillai's Trace	.990
	Wilks' Lambda	.990
	Hotelling's Trace	.990
	Roy's Largest Root	.990

a. Design: Intercept
Within Subjects Design: system

b. Exact statistic

Mauchly's Test of Sphericity[a]

Measure: keystrokes

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser
system	.000	.	2	.	.500

Mauchly's Test of Sphericity[a]

Measure: keystrokes

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
system	.500	.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: system

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: keystrokes

Source		Type III Sum of Squares	df	Mean Square	F
system	Sphericity Assumed	131.556	2	65.778	814.000
	Greenhouse-Geisser	131.556	1.000	131.556	814.000
	Huynh-Feldt	131.556	1.000	131.556	814.000
	Lower-bound	131.556	1.000	131.556	814.000
Error(system)	Sphericity Assumed	1.778	22	.081	
	Greenhouse-Geisser	1.778	11.000	.162	
	Huynh-Feldt	1.778	11.000	.162	
	Lower-bound	1.778	11.000	.162	

Tests of Within-Subjects Effects

Measure: keystrokes

Source		Sig.	Partial Eta Squared
system	Sphericity Assumed	.000	.987
	Greenhouse-Geisser	.000	.987
	Huynh-Feldt	.000	.987
	Lower-bound	.000	.987
Error(system)	Sphericity Assumed		
	Greenhouse-Geisser		
	Huynh-Feldt		
	Lower-bound		

Tests of Within-Subjects Contrasts

Measure: keystrokes

Source	system	Type III Sum of Squares	df	Mean Square	F	Sig.
system	Linear	130.667	1	130.667	1078.000	.000
	Quadratic	.889	1	.889	22.000	.001
Error(system)	Linear	1.333	11	.121		
	Quadratic	.444	11	.040		

Tests of Within-Subjects Contrasts

Measure: keystrokes

Source	system	Partial Eta Squared
system	Linear	.990
	Quadratic	.667
Error(system)	Linear	
	Quadratic	

Tests of Between-Subjects Effects

Measure: keystrokes

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	373.778	1	373.778	4625.500	.000	.998
Error	.889	11	.081			

Estimated Marginal Means

system

Estimates

Measure: keystrokes

system	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	5.667	.142	5.354	5.980
2	3.000	.000	3.000	3.000
3	1.000	.000	1.000	1.000

Pairwise Comparisons

Measure: keystrokes

(I) system	(J) system	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	2.667*	.142	.000	2.266	3.067
	3	4.667*	.142	.000	4.266	5.067
2	1	-2.667*	.142	.000	-3.067	-2.266
	3	2.000	.000	.	2.000	2.000
3	1	-4.667*	.142	.000	-5.067	-4.266
	2	-2.000	.000	.	-2.000	-2.000

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	.970	352.000[a]	1.000	11.000	.000	.970
Wilks' lambda	.030	352.000[a]	1.000	11.000	.000	.970
Hotelling's trace	32.000	352.000[a]	1.000	11.000	.000	.970
Roy's largest root	32.000	352.000[a]	1.000	11.000	.000	.970

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

a. Exact statistic