

```
PRESERVE.  
SET DECIMAL DOT.
```

```
GET DATA /TYPE=TXT  
  /FILE="F:\HMI\Exoskeleton\OpenSim\Walking_Mass_Inertia_Effect\Data\Statistic  
s\Ideal_Vs_Constrained\ActuatorsMaxPower_Dataset.csv"  
  /ENCODING='UTF8'  
  /DELIMITERS=", "  
  /QUALIFIER=''''  
  /ARRANGEMENT=DELIMITED  
  /FIRSTCASE=2  
  /DATATYPEMIN PERCENTAGE=95.0  
  /VARIABLES=  
    subjects AUTO  
    assistiveactuator AUTO  
    maxpower01 AUTO  
    maxpower02 AUTO  
    maxpower03 AUTO  
  /MAP.  
RESTORE.  
CACHE.  
EXECUTE.
```

Data written to the working file.
5 variables and 112 cases written.

Variable: subjects	Type: String	Format : A9	
Variable: assistiveactuator	Type: String	Format : A46	
Variable: maxpower01	Type: Number	Format : F11.9	
Variable: maxpower02	Type: Number	Format : F11.9	One or more val
ues were set to system-missing.			
Variable: maxpower03	Type: Number	Format : F11.9	

Substitute the following to build syntax for these data.

```
/VARIABLES=  
  subjects A9  
  assistiveactuator A46  
  maxpower01 F11.9  
  maxpower02 F11.9  
  maxpower03 F11.9
```

```
DATASET NAME DataSet1 WINDOW=FRONT.  
GLM maxpower01 maxpower02 maxpower03 BY assistiveactuator
```

```

/WSFACTOR=factor1 3 Polynomial
/METHOD=SSTYPE(3)
/POSTHOC=assistiveactuator(TUKEY)
/PRINT=DESCRIPTIVE HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=factor1
/DESIGN=assistiveactuator.

```

General Linear Model

[DataSet1]

Within-Subjects Factors

Measure: MEASURE_1

factor1	Dependent Variable
1	maxpower01
2	maxpower02
3	maxpower03

Between-Subjects Factors

		N
assistiveactuator	loaded biarticular hip actuator	7
	loaded biarticular knee actuator	7
	loaded constrained biarticular hip actuator	6
	loaded constrained biarticular knee actuator	6
	loaded constrained monoarticular hip actuator	7
	loaded constrained monoarticular knee actuator	7
	loaded monoarticular hip actuator	7
	loaded monoarticular knee actuator	7
	noload biarticular hip actuator	7

Between-Subjects Factors

	N
noload biarticular knee actuator	7
noload constrained biarticular hip actuator	7
noload constrained biarticular knee actuator	7
noload constrained monoarticular hip actuator	7
noload constrained monoarticular knee actuator	7
noload monoarticular hip actuator	7
noload monoarticular knee actuator	7

Descriptive Statistics

	assistiveactuator	Mean	Std. Deviation	N
maxpower01	loaded biarticular hip actuator	4.988900926	.8055876296	7
	loaded biarticular knee actuator	5.946326060	2.060184301	7
	loaded constrained biarticular hip actuator	2.954651045	.5325717109	6
	loaded constrained biarticular knee actuator	3.263841244	.7714872688	6
	loaded constrained monoarticular hip actuator	2.746990782	.4339244754	7
	loaded constrained monoarticular knee actuator	3.333594280	.7157351800	7
	loaded monoarticular hip actuator	4.204783390	.7917218011	7
	loaded monoarticular knee actuator	4.516800925	1.291647351	7
	noload biarticular hip actuator	4.645418959	.6359789582	7
	noload biarticular knee actuator	5.200910359	.6722069767	7

Descriptive Statistics

	assistiveactuator	Mean	Std. Deviation	N
	noload constrained biarticular hip actuator	3.533980822	.8645140284	7
	noload constrained biarticular knee actuator	3.039950539	.4595971045	7
	noload constrained monoarticular hip actuator	2.331552833	.4370077498	7
	noload constrained monoarticular knee actuator	4.051153485	1.009582545	7
	noload monoarticular hip actuator	2.980607647	.5107631913	7
	noload monoarticular knee actuator	4.265893780	.6380713465	7
	Total	3.889263702	1.285874036	110
maxpower02	loaded biarticular hip actuator	4.710620720	.9454121100	7
	loaded biarticular knee actuator	5.411117365	1.354423389	7
	loaded constrained biarticular hip actuator	2.943970697	.5503247120	6
	loaded constrained biarticular knee actuator	2.990076095	.6328768516	6
	loaded constrained monoarticular hip actuator	2.583070807	.4662119641	7
	loaded constrained monoarticular knee actuator	3.048908099	.5829233974	7
	loaded monoarticular hip actuator	3.914539963	.7815332405	7
	loaded monoarticular knee actuator	4.009591073	.8935529997	7
	noload biarticular hip actuator	4.662213281	.8320842212	7
	noload biarticular knee actuator	4.925768713	1.082789450	7
	noload constrained biarticular hip actuator	3.590983973	.9588409059	7
	noload constrained biarticular knee actuator	3.077955813	.4732928573	7

Descriptive Statistics

	assistiveactuator	Mean	Std. Deviation	N
	noload constrained monoarticular hip actuator	2.281856593	.3802031013	7
	noload constrained monoarticular knee actuator	3.797834786	.6562004568	7
	noload monoarticular hip actuator	2.828245394	.4710383658	7
	noload monoarticular knee actuator	4.104415976	.8835170251	7
	Total	3.693037624	1.158874148	110
maxpower03	loaded biarticular hip actuator	4.998997822	.6476972524	7
	loaded biarticular knee actuator	5.519823649	1.468035291	7
	loaded constrained biarticular hip actuator	3.077803253	.3930096883	6
	loaded constrained biarticular knee actuator	3.267201375	.7088779243	6
	loaded constrained monoarticular hip actuator	2.686896548	.5258173001	7
	loaded constrained monoarticular knee actuator	3.180704372	.5718814375	7
	loaded monoarticular hip actuator	4.136142387	.6118196904	7
	loaded monoarticular knee actuator	4.193703738	.8385113517	7
	noload biarticular hip actuator	4.656669267	.9360563979	7
	noload biarticular knee actuator	5.192070587	.7947163442	7
	noload constrained biarticular hip actuator	3.481797884	.9925178644	7
	noload constrained biarticular knee actuator	3.101669207	.4730615683	7
	noload constrained monoarticular hip actuator	2.266587780	.4484652081	7
	noload constrained monoarticular knee actuator	4.059228700	.9461020714	7

Descriptive Statistics

	assistiveactuator	Mean	Std. Deviation	N
	noload monoarticular hip actuator	2.964609350	.4436753945	7
	noload monoarticular knee actuator	4.370912144	.8275292631	7
	Total	3.833988380	1.183269451	110

Box's Test of Equality of Covariance Matrices^a

Box's M	230.049
F	2.020
df1	90
df2	6855.817
Sig.	.000

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

a. Design: Intercept + assistiveactuator
Within Subjects Design: factor1

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
factor1	Pillai's Trace	.158	8.703 ^b	2.000	93.000
	Wilks' Lambda	.842	8.703 ^b	2.000	93.000
	Hotelling's Trace	.187	8.703 ^b	2.000	93.000
	Roy's Largest Root	.187	8.703 ^b	2.000	93.000
factor1 * assistiveactuator	Pillai's Trace	.170	.581	30.000	188.000
	Wilks' Lambda	.837	.576 ^b	30.000	186.000
	Hotelling's Trace	.186	.570	30.000	184.000
	Roy's Largest Root	.110	.690 ^c	15.000	94.000

Multivariate Tests^a

Effect		Sig.
factor1	Pillai's Trace	.000
	Wilks' Lambda	.000
	Hotelling's Trace	.000
	Roy's Largest Root	.000
factor1 * assistiveactuator	Pillai's Trace	.960
	Wilks' Lambda	.963
	Hotelling's Trace	.965
	Roy's Largest Root	.789

a. Design: Intercept + assistiveactuator
Within Subjects Design: factor1

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b Greenhouse-Geisser
factor1	.762	25.220	2	.000	.808

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Epsilon ^b	
	Huynh-Feldt	Lower-bound
factor1	.951	.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 + assistiveactuator
Within Subjects Design: factor1

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
factor1	Sphericity Assumed	2.236	2	1.118	8.113
	Greenhouse-Geisser	2.236	1.616	1.384	8.113
	Huynh-Feldt	2.236	1.903	1.175	8.113
	Lower-bound	2.236	1.000	2.236	8.113
factor1 * assistiveactuator	Sphericity Assumed	2.313	30	.077	.559
	Greenhouse-Geisser	2.313	24.242	.095	.559
	Huynh-Feldt	2.313	28.540	.081	.559
	Lower-bound	2.313	15.000	.154	.559
Error(factor1)	Sphericity Assumed	25.910	188	.138	
	Greenhouse-Geisser	25.910	151.917	.171	
	Huynh-Feldt	25.910	178.850	.145	
	Lower-bound	25.910	94.000	.276	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.
factor1	Sphericity Assumed	.000
	Greenhouse-Geisser	.001
	Huynh-Feldt	.001
	Lower-bound	.005
factor1 * assistiveactuator	Sphericity Assumed	.969
	Greenhouse-Geisser	.952
	Huynh-Feldt	.966
	Lower-bound	.898
Error(factor1)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	factor1	Type III Sum of Squares	df	Mean Square	F
factor1	Linear	.155	1	.155	1.039
	Quadratic	2.081	1	2.081	16.454
factor1 * assistiveactuator	Linear	1.069	15	.071	.478
	Quadratic	1.244	15	.083	.656
Error(factor1)	Linear	14.020	94	.149	
	Quadratic	11.890	94	.126	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	factor1	Sig.
factor1	Linear	.311
	Quadratic	.000
factor1 * assistiveactuator	Linear	.946
	Quadratic	.821
Error(factor1)	Linear	
	Quadratic	

Levene's Test of Equality of Error Variances^a

		Levene Statistic	df1	df2	Sig.
maxpower01	Based on Mean	4.597	5	104	.001
	Based on Median	4.076	5	104	.002
	Based on Median and with adjusted df	4.076	5	81.314	.002
	Based on trimmed mean	4.584	5	104	.001
maxpower02	Based on Mean	1.837	5	104	.112
	Based on Median	1.480	5	104	.203
	Based on Median and with adjusted df	1.480	5	80.311	.205
	Based on trimmed mean	1.779	5	104	.124
maxpower03	Based on Mean	1.654	5	104	.152
	Based on Median	1.266	5	104	.284
	Based on Median and with adjusted df	1.266	5	78.124	.287
	Based on trimmed mean	1.614	5	104	.163

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

a. Design: Intercept + assistiveactuator
Within Subjects Design: factor1

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	4734.150	1	4734.150	2710.774	.000
assistiveactuator	286.842	15	19.123	10.950	.000
Error	164.163	94	1.746		

Post Hoc Tests

assistiveactuator

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
loaded biarticular hip actuator	loaded biarticular knee actuator	-.726249202	.4078305092	.917
	loaded constrained biarticular hip actuator	1.90736482 [*]	.4244834522	.002
	loaded constrained biarticular knee actuator	1.72580025 [*]	.4244834522	.009
	loaded constrained monoarticular hip actuator	2.22718711 [*]	.4078305092	.000
	loaded constrained monoarticular knee actuator	1.71177091 [*]	.4078305092	.006
	loaded monoarticular hip actuator	.8143512425	.4078305092	.821
	loaded monoarticular knee actuator	.6594745775	.4078305092	.961
	noload biarticular hip actuator	.2447393204	.4078305092	1.000
	noload biarticular knee actuator	-.206743397	.4078305092	1.000
	noload constrained biarticular hip actuator	1.363918930	.4078305092	.081
	noload constrained biarticular knee actuator	1.82631464 [*]	.4078305092	.002
	noload constrained monoarticular hip actuator	2.60617409 [*]	.4078305092	.000
	noload constrained monoarticular knee actuator	.9301008325	.4078305092	.638
	noload monoarticular hip actuator	1.97501903 [*]	.4078305092	.001
	noload monoarticular knee actuator	.6524325227	.4078305092	.965
loaded biarticular knee actuator	loaded biarticular hip actuator	.7262492016	.4078305092	.917
	loaded constrained biarticular hip actuator	2.63361403 [*]	.4244834522	.000

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
loaded biarticular hip actuator	loaded biarticular knee actuator	-.216209182	.7095934155
	loaded constrained biarticular hip actuator	.4128924462	3.401837203
	loaded constrained biarticular knee actuator	.2313278732	3.220272630
	loaded constrained monoarticular hip actuator	.7913444932	3.663029727
	loaded constrained monoarticular knee actuator	.2759282887	3.147613523
	loaded monoarticular hip actuator	-.621491375	2.250193860
	loaded monoarticular knee actuator	-.776368040	2.095317195
	noload biarticular hip actuator	-1.19110330	1.680581938
	noload biarticular knee actuator	-1.64258601	1.229099220
	noload constrained biarticular hip actuator	-.071923687	2.799761547
	noload constrained biarticular knee actuator	.3904720194	3.262157254
	noload constrained monoarticular hip actuator	1.170331470	4.042016705
	noload constrained monoarticular knee actuator	-.505741785	2.365943450
	noload monoarticular hip actuator	.5391764087	3.410861643
	noload monoarticular knee actuator	-.783410094	2.088275140
loaded biarticular knee actuator	loaded biarticular hip actuator	-.709593416	2.162091819
	loaded constrained biarticular hip actuator	1.139141648	4.128086404

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded constrained biarticular knee actuator	2.45204945 [*]	.4244834522	.000
	loaded constrained monoarticular hip actuator	2.95343631 [*]	.4078305092	.000
	loaded constrained monoarticular knee actuator	2.43802011 [*]	.4078305092	.000
	loaded monoarticular hip actuator	1.54060044 [*]	.4078305092	.023
	loaded monoarticular knee actuator	1.385723779	.4078305092	.070
	noload biarticular hip actuator	.9709885220	.4078305092	.566
	noload biarticular knee actuator	.5195058047	.4078305092	.996
	noload constrained biarticular hip actuator	2.09016813 [*]	.4078305092	.000
	noload constrained biarticular knee actuator	2.55256384 [*]	.4078305092	.000
	noload constrained monoarticular hip actuator	3.33242329 [*]	.4078305092	.000
	noload constrained monoarticular knee actuator	1.65635003 [*]	.4078305092	.009
	noload monoarticular hip actuator	2.70126823 [*]	.4078305092	.000
	noload monoarticular knee actuator	1.378681724	.4078305092	.074
	loaded constrained biarticular hip actuator	-1.90736482 [*]	.4244834522	.002
loaded constrained biarticular hip actuator	loaded biarticular knee actuator	-2.63361403 [*]	.4244834522	.000
	loaded constrained biarticular knee actuator	-.181564573	.4405072965	1.000
	loaded constrained monoarticular hip actuator	.3198222858	.4244834522	1.000

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	loaded constrained biarticular knee actuator	.9575770748	3.946521831
	loaded constrained monoarticular hip actuator	1.517593695	4.389278929
	loaded constrained monoarticular knee actuator	1.002177490	3.873862725
	loaded monoarticular hip actuator	.1047578270	2.976443061
	loaded monoarticular knee actuator	-.050118838	2.821566396
	noload biarticular hip actuator	-.464854095	2.406831139
	noload biarticular knee actuator	-.916336812	1.955348422
	noload constrained biarticular hip actuator	.6543255141	3.526010748
	noload constrained biarticular knee actuator	1.116721221	3.988406455
	noload constrained monoarticular hip actuator	1.896580672	4.768265906
	noload constrained monoarticular knee actuator	.2205074170	3.092192651
	noload monoarticular hip actuator	1.265425610	4.137110845
	noload monoarticular knee actuator	-.057160893	2.814524341
loaded constrained biarticular hip actuator	loaded biarticular hip actuator	-3.40183720	-.412892446
	loaded biarticular knee actuator	-4.12808640	-1.13914165
	loaded constrained biarticular knee actuator	-1.73245185	1.369322708
	loaded constrained monoarticular hip actuator	-1.17465009	1.814294664

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded constrained monoarticular knee actuator	-.195593919	.4244834522	1.000
	loaded monoarticular hip actuator	-1.09301358	.4244834522	.428
	loaded monoarticular knee actuator	-1.24789025	.4244834522	.216
	noload biarticular hip actuator	-1.66262550*	.4244834522	.015
	noload biarticular knee actuator	-2.11410822*	.4244834522	.000
	noload constrained biarticular hip actuator	-.543445895	.4244834522	.996
	noload constrained biarticular knee actuator	-.081050188	.4244834522	1.000
	noload constrained monoarticular hip actuator	.6988092630	.4244834522	.955
	noload constrained monoarticular knee actuator	-.977263992	.4244834522	.623
	noload monoarticular hip actuator	.0676542013	.4244834522	1.000
	noload monoarticular knee actuator	-1.25493230	.4244834522	.208
loaded constrained biarticular knee actuator	loaded biarticular hip actuator	-1.72580025*	.4244834522	.009
	loaded biarticular knee actuator	-2.45204945*	.4244834522	.000
	loaded constrained biarticular hip actuator	.1815645730	.4405072965	1.000
	loaded constrained monoarticular hip actuator	.5013868588	.4244834522	.998
	loaded constrained monoarticular knee actuator	-.014029346	.4244834522	1.000
	loaded monoarticular hip actuator	-.911449009	.4244834522	.730

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
	loaded constrained monoarticular knee actuator	-1.69006630	1.298878460
	loaded monoarticular hip actuator	-2.58748596	.4014587963
	loaded monoarticular knee actuator	-2.74236263	.2465821313
	noload biarticular hip actuator	-3.15709788	-.168153126
	noload biarticular knee actuator	-3.60858060	-.619635843
	noload constrained biarticular hip actuator	-2.03791827	.9510264835
	noload constrained biarticular knee actuator	-1.57552257	1.413422190
	noload constrained monoarticular hip actuator	-.795663115	2.193281641
	noload constrained monoarticular knee actuator	-2.47173637	.5172083863
	noload monoarticular hip actuator	-1.42681818	1.562126580
	noload monoarticular knee actuator	-2.74940468	.2395400765
loaded constrained biarticular knee actuator	loaded biarticular hip actuator	-3.22027263	-.231327873
	loaded biarticular knee actuator	-3.94652183	-.957577075
	loaded constrained biarticular hip actuator	-1.36932271	1.732451854
	loaded constrained monoarticular hip actuator	-.993085520	1.995859237
	loaded constrained monoarticular knee actuator	-1.50850172	1.480443033
	loaded monoarticular hip actuator	-2.40592139	.5830233693

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded monoarticular knee actuator	-1.06632567	.4244834522	.472
	noload biarticular hip actuator	-1.48106093	.4244834522	.055
	noload biarticular knee actuator	-1.93254365 [*]	.4244834522	.002
	noload constrained biarticular hip actuator	-.361881322	.4244834522	1.000
	noload constrained biarticular knee actuator	.1005143850	.4244834522	1.000
	noload constrained monoarticular hip actuator	.8803738360	.4244834522	.776
	noload constrained monoarticular knee actuator	-.795699419	.4244834522	.881
	noload monoarticular hip actuator	.2492187743	.4244834522	1.000
	noload monoarticular knee actuator	-1.07336773	.4244834522	.460
loaded constrained monoarticular hip actuator	loaded biarticular hip actuator	-2.22718711 [*]	.4078305092	.000
	loaded biarticular knee actuator	-2.95343631 [*]	.4078305092	.000
	loaded constrained biarticular hip actuator	-.319822286	.4244834522	1.000
	loaded constrained biarticular knee actuator	-.501386859	.4244834522	.998
	loaded constrained monoarticular knee actuator	-.515416204	.4078305092	.996
	loaded monoarticular hip actuator	-1.41283587	.4078305092	.059
	loaded monoarticular knee actuator	-1.56771253 [*]	.4078305092	.019
	noload biarticular hip actuator	-1.98244779 [*]	.4078305092	.000
	noload biarticular knee actuator	-2.43393051 [*]	.4078305092	.000

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
	loaded monoarticular knee actuator	-2.56079805	.4281467043
	noload biarticular hip actuator	-2.97553331	.0134114472
	noload biarticular knee actuator	-3.42701603	-.438071270
	noload constrained biarticular hip actuator	-1.85635370	1.132591056
	noload constrained biarticular knee actuator	-1.39395799	1.594986763
	noload constrained monoarticular hip actuator	-.614098542	2.374846214
	noload constrained monoarticular knee actuator	-2.29017180	.6987729593
	noload monoarticular hip actuator	-1.24525360	1.743691153
	noload monoarticular knee actuator	-2.56784011	.4211046495
loaded constrained monoarticular hip actuator	loaded biarticular hip actuator	-3.66302973	-.791344493
	loaded biarticular knee actuator	-4.38927893	-1.51759369
	loaded constrained biarticular hip actuator	-1.81429466	1.174650093
	loaded constrained biarticular knee actuator	-1.99585924	.9930855195
	loaded constrained monoarticular knee actuator	-1.95125882	.9204264126
	loaded monoarticular hip actuator	-2.84867848	.0230067493
	loaded monoarticular knee actuator	-3.00355515	-.131869916
	noload biarticular hip actuator	-3.41829041	-.546605173
	noload biarticular knee actuator	-3.86977312	-.998087890

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	noload constrained biarticular hip actuator	-.863268181	.4078305092	.750
	noload constrained biarticular knee actuator	-.400872474	.4078305092	1.000
	noload constrained monoarticular hip actuator	.3789869772	.4078305092	1.000
	noload constrained monoarticular knee actuator	-1.29708628	.4078305092	.124
	noload monoarticular hip actuator	-.252168084	.4078305092	1.000
	noload monoarticular knee actuator	-1.57475459 [*]	.4078305092	.018
loaded constrained monoarticular knee actuator	loaded biarticular hip actuator	-1.71177091 [*]	.4078305092	.006
	loaded biarticular knee actuator	-2.43802011 [*]	.4078305092	.000
	loaded constrained biarticular hip actuator	.1955939187	.4244834522	1.000
	loaded constrained biarticular knee actuator	.0140293457	.4244834522	1.000
	loaded constrained monoarticular hip actuator	.5154162045	.4078305092	.996
	loaded monoarticular hip actuator	-.897419663	.4078305092	.694
	loaded monoarticular knee actuator	-1.05229633	.4078305092	.425
	noload biarticular hip actuator	-1.46703159 [*]	.4078305092	.040
	noload biarticular knee actuator	-1.91851430 [*]	.4078305092	.001
	noload constrained biarticular hip actuator	-.347851976	.4078305092	1.000
	noload constrained biarticular knee actuator	.1145437306	.4078305092	1.000

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	noload constrained biarticular hip actuator	-2.29911080	.5725744365
	noload constrained biarticular knee actuator	-1.83671509	1.034970143
	noload constrained monoarticular hip actuator	-1.05685564	1.814829594
	noload constrained monoarticular knee actuator	-2.73292889	.1387563393
	noload monoarticular hip actuator	-1.68801070	1.183674533
	noload monoarticular knee actuator	-3.01059720	-.138911970
loaded constrained monoarticular knee actuator	loaded biarticular hip actuator	-3.14761352	-.275928289
	loaded biarticular knee actuator	-3.87386272	-1.00217749
	loaded constrained biarticular hip actuator	-1.29887846	1.690066297
	loaded constrained biarticular knee actuator	-1.48044303	1.508501724
	loaded constrained monoarticular hip actuator	-.920426413	1.951258822
	loaded monoarticular hip actuator	-2.33326228	.5384229538
	loaded monoarticular knee actuator	-2.48813895	.3835462888
	noload biarticular hip actuator	-2.90287420	-.031188968
	noload biarticular knee actuator	-3.35435692	-.482671686
	noload constrained biarticular hip actuator	-1.78369459	1.087990641
	noload constrained biarticular knee actuator	-1.32129889	1.550386348

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	noload constrained monoarticular hip actuator	.8944031817	.4078305092	.699
	noload constrained monoarticular knee actuator	-.781670073	.4078305092	.862
	noload monoarticular hip actuator	.2632481200	.4078305092	1.000
	noload monoarticular knee actuator	-1.05933838	.4078305092	.413
loaded monoarticular hip actuator	loaded biarticular hip actuator	-.814351243	.4078305092	.821
	loaded biarticular knee actuator	-1.54060044*	.4078305092	.023
	loaded constrained biarticular hip actuator	1.093013582	.4244834522	.428
	loaded constrained biarticular knee actuator	.9114490090	.4244834522	.730
	loaded constrained monoarticular hip actuator	1.412835868	.4078305092	.059
	loaded constrained monoarticular knee actuator	.8974196633	.4078305092	.694
	loaded monoarticular knee actuator	-.154876665	.4078305092	1.000
	noload biarticular hip actuator	-.569611922	.4078305092	.990
	noload biarticular knee actuator	-1.02109464	.4078305092	.478
	noload constrained biarticular hip actuator	.5495676871	.4078305092	.993
	noload constrained biarticular knee actuator	1.011963394	.4078305092	.494
	noload constrained monoarticular hip actuator	1.79182285*	.4078305092	.003

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	noload constrained monoarticular hip actuator	-.541439435	2.330245799
	noload constrained monoarticular knee actuator	-2.21751269	.6541725438
	noload monoarticular hip actuator	-1.17259450	1.699090737
	noload monoarticular knee actuator	-2.49518100	.3765042340
loaded monoarticular hip actuator	loaded biarticular hip actuator	-2.25019386	.6214913746
	loaded biarticular knee actuator	-2.97644306	-.104757827
	loaded constrained biarticular hip actuator	-.401458796	2.587485960
	loaded constrained biarticular knee actuator	-.583023369	2.405921387
	loaded constrained monoarticular hip actuator	-.023006749	2.848678485
	loaded constrained monoarticular knee actuator	-.538422954	2.333262280
	loaded monoarticular knee actuator	-1.59071928	1.280965952
	noload biarticular hip actuator	-2.00545454	.8662306950
	noload biarticular knee actuator	-2.45693726	.4147479777
	noload constrained biarticular hip actuator	-.886274930	1.985410304
	noload constrained biarticular knee actuator	-.423879223	2.447806011
	noload constrained monoarticular hip actuator	.3559802279	3.227665462

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	noload constrained monoarticular knee actuator	.1157495900	.4078305092	1.000
	noload monoarticular hip actuator	1.160667783	.4078305092	.263
	noload monoarticular knee actuator	-.161918720	.4078305092	1.000
loaded monoarticular knee actuator	loaded biarticular hip actuator	-.659474578	.4078305092	.961
	loaded biarticular knee actuator	-1.38572378	.4078305092	.070

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
	noload constrained monoarticular knee actuator	-1.32009303	1.551592207
	noload monoarticular hip actuator	-.275174834	2.596510400
	noload monoarticular knee actuator	-1.59776134	1.273923897
loaded monoarticular knee actuator	loaded biarticular hip actuator	-2.09531719	.7763680396
	loaded biarticular knee actuator	-2.82156640	.0501188380

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded constrained biarticular hip actuator	1.247890247	.4244834522	.216
	loaded constrained biarticular knee actuator	1.066325674	.4244834522	.472
	loaded constrained monoarticular hip actuator	1.56771253 [*]	.4078305092	.019
	loaded constrained monoarticular knee actuator	1.052296328	.4078305092	.425
	loaded monoarticular hip actuator	.1548766650	.4078305092	1.000
	noload biarticular hip actuator	-.414735257	.4078305092	1.000
	noload biarticular knee actuator	-.866217974	.4078305092	.745
	noload constrained biarticular hip actuator	.7044443521	.4078305092	.934
	noload constrained biarticular knee actuator	1.166840059	.4078305092	.255
	noload constrained monoarticular hip actuator	1.94669951 [*]	.4078305092	.001
	noload constrained monoarticular knee actuator	.2706262550	.4078305092	1.000
	noload monoarticular hip actuator	1.315544448	.4078305092	.111
	noload monoarticular knee actuator	-.007042055	.4078305092	1.000
	noload biarticular hip actuator	-.244739320	.4078305092	1.000
noload biarticular hip actuator	loaded biarticular hip actuator	-.244739320	.4078305092	1.000
	loaded biarticular knee actuator	-.970988522	.4078305092	.566
	loaded constrained biarticular hip actuator	1.66262550 [*]	.4244834522	.015
	loaded constrained biarticular knee actuator	1.481060931	.4244834522	.055

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	loaded constrained biarticular hip actuator	-.246582131	2.742362625
	loaded constrained biarticular knee actuator	-.428146704	2.560798052
	loaded constrained monoarticular hip actuator	.1318699157	3.003555150
	loaded constrained monoarticular knee actuator	-.383546289	2.488138945
	loaded monoarticular hip actuator	-1.28096595	1.590719282
	noload biarticular hip actuator	-1.85057787	1.021107360
	noload biarticular knee actuator	-2.30206059	.5696246427
	noload constrained biarticular hip actuator	-.731398265	2.140286969
	noload constrained biarticular knee actuator	-.269002558	2.602682676
	noload constrained monoarticular hip actuator	.5108568929	3.382542127
	noload constrained monoarticular knee actuator	-1.16521636	1.706468872
	noload monoarticular hip actuator	-.120298169	2.751387065
	noload monoarticular knee actuator	-1.44288467	1.428800562
	noload biarticular hip actuator	-1.68058194	1.191103297
noload biarticular hip actuator	loaded biarticular hip actuator	-1.68058194	1.191103297
	loaded biarticular knee actuator	-2.40683114	.4648540951
	loaded constrained biarticular hip actuator	.1681531258	3.157097882
	loaded constrained biarticular knee actuator	-.013411447	2.975533309

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded constrained monoarticular hip actuator	1.98244779 [*]	.4078305092	.000
	loaded constrained monoarticular knee actuator	1.46703159 [*]	.4078305092	.040
	loaded monoarticular hip actuator	.5696119221	.4078305092	.990
	loaded monoarticular knee actuator	.4147352571	.4078305092	1.000
	noload biarticular knee actuator	-.451482717	.4078305092	.999
	noload constrained biarticular hip actuator	1.119179609	.4078305092	.320
	noload constrained biarticular knee actuator	1.58157532 [*]	.4078305092	.017
	noload constrained monoarticular hip actuator	2.36143477 [*]	.4078305092	.000
	noload constrained monoarticular knee actuator	.6853615121	.4078305092	.947
	noload monoarticular hip actuator	1.73027971 [*]	.4078305092	.005
	noload monoarticular knee actuator	.4076932023	.4078305092	1.000
noload biarticular knee actuator	loaded biarticular hip actuator	.2067433969	.4078305092	1.000
	loaded biarticular knee actuator	-.519505805	.4078305092	.996
	loaded constrained biarticular hip actuator	2.11410822 [*]	.4244834522	.000
	loaded constrained biarticular knee actuator	1.93254365 [*]	.4244834522	.002
	loaded constrained monoarticular hip actuator	2.43393051 [*]	.4078305092	.000

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	loaded constrained monoarticular hip actuator	.5466051728	3.418290407
	loaded constrained monoarticular knee actuator	.0311889683	2.902874203
	loaded monoarticular hip actuator	-.866230695	2.005454539
	loaded monoarticular knee actuator	-1.02110736	1.850577874
	noload biarticular knee actuator	-1.88732533	.984359898
	noload constrained biarticular hip actuator	-.316663008	2.555022226
	noload constrained biarticular knee actuator	.1457326989	3.017417933
	noload constrained monoarticular hip actuator	.9255921500	3.797277384
	noload constrained monoarticular knee actuator	-.750481105	2.121204129
	noload monoarticular hip actuator	.2944370883	3.166122323
	noload monoarticular knee actuator	-1.02814941	1.843535819
noload biarticular knee actuator	loaded biarticular hip actuator	-1.22909922	1.642586014
	loaded biarticular knee actuator	-1.95534842	.9163368124
	loaded constrained biarticular hip actuator	.6196358431	3.608580600
	loaded constrained biarticular knee actuator	.4380712701	3.427016027
	loaded constrained monoarticular hip actuator	.9980878901	3.869773124

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded constrained monoarticular knee actuator	1.91851430 [*]	.4078305092	.001
	loaded monoarticular hip actuator	1.021094639	.4078305092	.478
	loaded monoarticular knee actuator	.8662179744	.4078305092	.745
	noload biarticular hip actuator	.4514827173	.4078305092	.999
	noload constrained biarticular hip actuator	1.57066233 [*]	.4078305092	.018
	noload constrained biarticular knee actuator	2.03305803 [*]	.4078305092	.000
	noload constrained monoarticular hip actuator	2.81291748 [*]	.4078305092	.000
	noload constrained monoarticular knee actuator	1.136844229	.4078305092	.295
	noload monoarticular hip actuator	2.18176242 [*]	.4078305092	.000
	noload monoarticular knee actuator	.8591759196	.4078305092	.756
noload constrained biarticular hip actuator	loaded biarticular hip actuator	-1.36391893	.4078305092	.081
	loaded biarticular knee actuator	-2.09016813 [*]	.4078305092	.000
	loaded constrained biarticular hip actuator	.5434458949	.4244834522	.996
	loaded constrained biarticular knee actuator	.3618813219	.4244834522	1.000
	loaded constrained monoarticular hip actuator	.8632681807	.4078305092	.750
	loaded constrained monoarticular knee actuator	.3478519762	.4078305092	1.000
	loaded monoarticular hip actuator	-.549567687	.4078305092	.993

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
	loaded constrained monoarticular knee actuator	.4826716856	3.354356920
	loaded monoarticular hip actuator	-.414747978	2.456937257
	loaded monoarticular knee actuator	-.569624643	2.302060592
	noload biarticular hip actuator	-.984359900	1.887325334
	noload constrained biarticular hip actuator	.1348197094	3.006504944
	noload constrained biarticular knee actuator	.5972154162	3.468900650
	noload constrained monoarticular hip actuator	1.377074867	4.248760102
	noload constrained monoarticular knee actuator	-.298998388	2.572686847
	noload monoarticular hip actuator	.7459198056	3.617605040
	noload monoarticular knee actuator	-.576666698	2.295018537
noload constrained biarticular hip actuator	loaded biarticular hip actuator	-2.79976155	.0719236875
	loaded biarticular knee actuator	-3.52601075	-.654325514
	loaded constrained biarticular hip actuator	-.951026483	2.037918273
	loaded constrained biarticular knee actuator	-1.13259106	1.856353700
	loaded constrained monoarticular hip actuator	-.572574436	2.299110798
	loaded constrained monoarticular knee actuator	-1.08799064	1.783694593
	loaded monoarticular hip actuator	-1.98541030	.8862749300

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	loaded monoarticular knee actuator	-.704444352	.4078305092	.934
	noload biarticular hip actuator	-1.11917961	.4078305092	.320
	noload biarticular knee actuator	-1.57066233 [*]	.4078305092	.018
	noload constrained biarticular knee actuator	.4623957068	.4078305092	.999
	noload constrained monoarticular hip actuator	1.242255158	.4078305092	.171
	noload constrained monoarticular knee actuator	-.433818097	.4078305092	.999
	noload monoarticular hip actuator	.6111000962	.4078305092	.980
	noload monoarticular knee actuator	-.711486407	.4078305092	.929
noload constrained biarticular knee actuator	loaded biarticular hip actuator	-1.82631464 [*]	.4078305092	.002
	loaded biarticular knee actuator	-2.55256384 [*]	.4078305092	.000
	loaded constrained biarticular hip actuator	.0810501880	.4244834522	1.000
	loaded constrained biarticular knee actuator	-.100514385	.4244834522	1.000
	loaded constrained monoarticular hip actuator	.4008724739	.4078305092	1.000
	loaded constrained monoarticular knee actuator	-.114543731	.4078305092	1.000
	loaded monoarticular hip actuator	-1.01196339	.4078305092	.494
	loaded monoarticular knee actuator	-1.16684006	.4078305092	.255
	noload biarticular hip actuator	-1.58157532 [*]	.4078305092	.017

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
	loaded monoarticular knee actuator	-2.14028697	.7313982650
	noload biarticular hip actuator	-2.55502223	.3166630079
	noload biarticular knee actuator	-3.00650494	-.134819709
	noload constrained biarticular knee actuator	-.973446910	1.898238324
	noload constrained monoarticular hip actuator	-.193587459	2.678097775
	noload constrained monoarticular knee actuator	-1.86966071	1.002024520
	noload monoarticular hip actuator	-.824742521	2.046942713
	noload monoarticular knee actuator	-2.14732902	.7243562102
noload constrained biarticular knee actuator	loaded biarticular hip actuator	-3.26215725	-.390472019
	loaded biarticular knee actuator	-3.98840646	-1.11672122
	loaded constrained biarticular hip actuator	-1.41342219	1.575522566
	loaded constrained biarticular knee actuator	-1.59498676	1.393957993
	loaded constrained monoarticular hip actuator	-1.03497014	1.836715091
	loaded constrained monoarticular knee actuator	-1.55038635	1.321298887
	loaded monoarticular hip actuator	-2.44780601	.4238792232
	loaded monoarticular knee actuator	-2.60268268	.2690025582
	noload biarticular hip actuator	-3.01741793	-.145732699

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	noload biarticular knee actuator	-2.03305803 [*]	.4078305092	.000
	noload constrained biarticular hip actuator	-.462395707	.4078305092	.999
	noload constrained monoarticular hip actuator	.7798594511	.4078305092	.864
	noload constrained monoarticular knee actuator	-.896213804	.4078305092	.696
	noload monoarticular hip actuator	.1487043894	.4078305092	1.000
	noload monoarticular knee actuator	-1.17388211	.4078305092	.246
noload constrained monoarticular hip actuator	loaded biarticular hip actuator	-2.60617409 [*]	.4078305092	.000
	loaded biarticular knee actuator	-3.33242329 [*]	.4078305092	.000
	loaded constrained biarticular hip actuator	-.698809263	.4244834522	.955
	loaded constrained biarticular knee actuator	-.880373836	.4244834522	.776
	loaded constrained monoarticular hip actuator	-.378986977	.4078305092	1.000
	loaded constrained monoarticular knee actuator	-.894403182	.4078305092	.699
	loaded monoarticular hip actuator	-1.79182285 [*]	.4078305092	.003
	loaded monoarticular knee actuator	-1.94669951 [*]	.4078305092	.001
	noload biarticular hip actuator	-2.36143477 [*]	.4078305092	.000
	noload biarticular knee actuator	-2.81291748 [*]	.4078305092	.000
	noload constrained biarticular hip actuator	-1.24225516	.4078305092	.171

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
	noload biarticular knee actuator	-3.46890065	-.597215416
	noload constrained biarticular hip actuator	-1.89823832	.9734469103
	noload constrained monoarticular hip actuator	-.655983166	2.215702068
	noload constrained monoarticular knee actuator	-2.33205642	.5396288132
	noload monoarticular hip actuator	-1.28713823	1.584547007
	noload monoarticular knee actuator	-2.60972473	.2619605034
noload constrained monoarticular hip actuator	loaded biarticular hip actuator	-4.04201670	-1.17033147
	loaded biarticular knee actuator	-4.76826591	-1.89658067
	loaded constrained biarticular hip actuator	-2.19328164	.7956631153
	loaded constrained biarticular knee actuator	-2.37484621	.6140985423
	loaded constrained monoarticular hip actuator	-1.81482959	1.056855640
	loaded constrained monoarticular knee actuator	-2.33024580	.5414394354
	loaded monoarticular hip actuator	-3.22766546	-.355980228
	loaded monoarticular knee actuator	-3.38254213	-.510856893
	noload biarticular hip actuator	-3.79727738	-.925592150
	noload biarticular knee actuator	-4.24876010	-1.37707487
	noload constrained biarticular hip actuator	-2.67809778	.1935874592

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	noload constrained biarticular knee actuator	-.779859451	.4078305092	.864
	noload constrained monoarticular knee actuator	-1.67607326*	.4078305092	.008
	noload monoarticular hip actuator	-.631155062	.4078305092	.973
	noload monoarticular knee actuator	-1.95374156*	.4078305092	.001
noload constrained monoarticular knee actuator	loaded biarticular hip actuator	-.930100833	.4078305092	.638
	loaded biarticular knee actuator	-1.65635003*	.4078305092	.009
	loaded constrained biarticular hip actuator	.9772639920	.4244834522	.623
	loaded constrained biarticular knee actuator	.7956994190	.4244834522	.881
	loaded constrained monoarticular hip actuator	1.297086278	.4078305092	.124
	loaded constrained monoarticular knee actuator	.7816700733	.4078305092	.862
	loaded monoarticular hip actuator	-.115749590	.4078305092	1.000
	loaded monoarticular knee actuator	-.270626255	.4078305092	1.000
	noload biarticular hip actuator	-.685361512	.4078305092	.947
	noload biarticular knee actuator	-1.13684423	.4078305092	.295
	noload constrained biarticular hip actuator	.4338180971	.4078305092	.999
	noload constrained biarticular knee actuator	.8962138040	.4078305092	.696
	noload constrained monoarticular hip actuator	1.67607326*	.4078305092	.008

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	noload constrained biarticular knee actuator	-2.21570207	.6559831660
	noload constrained monoarticular knee actuator	-3.11191587	-.240230638
	noload monoarticular hip actuator	-2.06699768	.8046875554
	noload monoarticular knee actuator	-3.38958418	-.517898948
noload constrained monoarticular knee actuator	loaded biarticular hip actuator	-2.36594345	.5057417846
	loaded biarticular knee actuator	-3.09219265	-.220507417
	loaded constrained biarticular hip actuator	-.517208386	2.471736370
	loaded constrained biarticular knee actuator	-.698772959	2.290171797
	loaded constrained monoarticular hip actuator	-.138756339	2.732928895
	loaded constrained monoarticular knee actuator	-.654172544	2.217512690
	loaded monoarticular hip actuator	-1.55159221	1.320093027
	loaded monoarticular knee actuator	-1.70646887	1.165216362
	noload biarticular hip actuator	-2.12120413	.7504811050
	noload biarticular knee actuator	-2.57268685	.2989983877
	noload constrained biarticular hip actuator	-1.00202452	1.869660714
	noload constrained biarticular knee actuator	-.539628813	2.332056421
	noload constrained monoarticular hip actuator	.2402306379	3.111915872

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
	noload monoarticular hip actuator	1.044918193	.4078305092	.437
	noload monoarticular knee actuator	-.277668310	.4078305092	1.000
noload monoarticular hip actuator	loaded biarticular hip actuator	-1.97501903 [*]	.4078305092	.001
	loaded biarticular knee actuator	-2.70126823 [*]	.4078305092	.000
	loaded constrained biarticular hip actuator	-.067654201	.4244834522	1.000
	loaded constrained biarticular knee actuator	-.249218774	.4244834522	1.000
	loaded constrained monoarticular hip actuator	.2521680845	.4078305092	1.000
	loaded constrained monoarticular knee actuator	-.263248120	.4078305092	1.000
	loaded monoarticular hip actuator	-1.16066778	.4078305092	.263
	loaded monoarticular knee actuator	-1.31554445	.4078305092	.111
	noload biarticular hip actuator	-1.73027971 [*]	.4078305092	.005
	noload biarticular knee actuator	-2.18176242 [*]	.4078305092	.000
	noload constrained biarticular hip actuator	-.611100096	.4078305092	.980
	noload constrained biarticular knee actuator	-.148704389	.4078305092	1.000
	noload constrained monoarticular hip actuator	.6311550617	.4078305092	.973
	noload constrained monoarticular knee actuator	-1.04491819	.4078305092	.437
	noload monoarticular knee actuator	-1.32258650	.4078305092	.106

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

		95% Confidence Interval	
(I) assistiveactuator	(J) assistiveactuator	Lower Bound	Upper Bound
	noload monoarticular hip actuator	-.390924424	2.480760810
	noload monoarticular knee actuator	-1.71351093	1.158174307
noload monoarticular hip actuator	loaded biarticular hip actuator	-3.41086164	-.539176409
	loaded biarticular knee actuator	-4.13711084	-1.26542561
	loaded constrained biarticular hip actuator	-1.56212658	1.426818177
	loaded constrained biarticular knee actuator	-1.74369115	1.245253604
	loaded constrained monoarticular hip actuator	-1.18367453	1.688010702
	loaded constrained monoarticular knee actuator	-1.69909074	1.172594497
	loaded monoarticular hip actuator	-2.59651040	.2751748338
	loaded monoarticular knee actuator	-2.75138707	.1202981688
	noload biarticular hip actuator	-3.16612232	-.294437088
	noload biarticular knee actuator	-3.61760504	-.745919806
	noload constrained biarticular hip actuator	-2.04694271	.8247425209
	noload constrained biarticular knee actuator	-1.58454701	1.287138228
	noload constrained monoarticular hip actuator	-.804687555	2.066997679
	noload constrained monoarticular knee actuator	-2.48076081	.3909244238
	noload monoarticular knee actuator	-2.75842912	.1132561140

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	Mean Difference (I-J)	Std. Error	Sig.
noload monoarticular knee actuator	loaded biarticular hip actuator	-.652432523	.4078305092	.965
	loaded biarticular knee actuator	-1.37868172	.4078305092	.074
	loaded constrained biarticular hip actuator	1.254932302	.4244834522	.208
	loaded constrained biarticular knee actuator	1.073367729	.4244834522	.460
	loaded constrained monoarticular hip actuator	1.57475459 [*]	.4078305092	.018
	loaded constrained monoarticular knee actuator	1.059338383	.4078305092	.413
	loaded monoarticular hip actuator	.1619187198	.4078305092	1.000
	loaded monoarticular knee actuator	.0070420548	.4078305092	1.000
	noload biarticular hip actuator	-.407693202	.4078305092	1.000
	noload biarticular knee actuator	-.859175920	.4078305092	.756
	noload constrained biarticular hip actuator	.7114864070	.4078305092	.929
	noload constrained biarticular knee actuator	1.173882114	.4078305092	.246
	noload constrained monoarticular hip actuator	1.95374156 [*]	.4078305092	.001
	noload constrained monoarticular knee actuator	.2776683098	.4078305092	1.000
	noload monoarticular hip actuator	1.322586503	.4078305092	.106

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) assistiveactuator	(J) assistiveactuator	95% Confidence Interval	
		Lower Bound	Upper Bound
noload monoarticular knee actuator	loaded biarticular hip actuator	-2.08827514	.7834100944
	loaded biarticular knee actuator	-2.81452434	.0571608928
	loaded constrained biarticular hip actuator	-.239540077	2.749404680
	loaded constrained biarticular knee actuator	-.421104650	2.567840107
	loaded constrained monoarticular hip actuator	.1389119705	3.010597205
	loaded constrained monoarticular knee actuator	-.376504234	2.495181000
	loaded monoarticular hip actuator	-1.27392390	1.597761337
	loaded monoarticular knee actuator	-1.42880056	1.442884672
	noload biarticular hip actuator	-1.84353582	1.028149415
	noload biarticular knee actuator	-2.29501854	.5766666975
	noload constrained biarticular hip actuator	-.724356210	2.147329024
	noload constrained biarticular knee actuator	-.261960503	2.609724731
	noload constrained monoarticular hip actuator	.5178989477	3.389584182
	noload constrained monoarticular knee actuator	-1.15817431	1.713510927
	noload monoarticular hip actuator	-.113256114	2.758429120

Based on observed means.

The error term is Mean Square(Error) = .582.

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

Homogeneous Subsets

MEASURE_1

Tukey HSD^{a,b,c}

assistiveactuator	N	Subset			
		1	2	3	4
noload constrained monoarticular hip actuator	7	2.293332402			
loaded constrained monoarticular hip actuator	7	2.672319379	2.672319379		
noload monoarticular hip actuator	7	2.924487464	2.924487464	2.924487464	
loaded constrained biarticular hip actuator	6	2.992141665	2.992141665	2.992141665	
noload constrained biarticular knee actuator	7	3.073191853	3.073191853	3.073191853	
loaded constrained biarticular knee actuator	6	3.173706238	3.173706238	3.173706238	
loaded constrained monoarticular knee actuator	7	3.187735584	3.187735584	3.187735584	
noload constrained biarticular hip actuator	7	3.535587560	3.535587560	3.535587560	3.535587560
noload constrained monoarticular knee actuator	7		3.969405657	3.969405657	3.969405657
loaded monoarticular hip actuator	7		4.085155247	4.085155247	4.085155247
loaded monoarticular knee actuator	7			4.240031912	4.240031912
noload monoarticular knee actuator	7			4.247073967	4.247073967
noload biarticular hip actuator	7				4.654767169
loaded biarticular hip actuator	7				4.899506490
noload biarticular knee actuator	7				
loaded biarticular knee actuator	7				
Sig.		.183	.065	.115	.089

MEASURE_1

Tukey HSD^{a,b,c}

	Subset	
assistiveactuator	5	6
noload constrained monoarticular hip actuator		
loaded constrained monoarticular hip actuator		
noload monoarticular hip actuator		
loaded constrained biarticular hip actuator		
noload constrained biarticular knee actuator		
loaded constrained biarticular knee actuator		
loaded constrained monoarticular knee actuator		
noload constrained biarticular hip actuator		
noload constrained monoarticular knee actuator	3.969405657	
loaded monoarticular hip actuator	4.085155247	
loaded monoarticular knee actuator	4.240031912	4.240031912
noload monoarticular knee actuator	4.247073967	4.247073967
noload biarticular hip actuator	4.654767169	4.654767169
loaded biarticular hip actuator	4.899506490	4.899506490
noload biarticular knee actuator	5.106249886	5.106249886
loaded biarticular knee actuator		5.625755691
Sig.	.311	.077

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .582.

- a. Uses Harmonic Mean Sample Size = 6.857.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.