```
GLM Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Num_Num_Car Bar_Num_Num_Movie Bar_Ord_Num_Car
    Bar_Ord_Num_Movie Line_Nom_Num_Car Line_Nom_Num_Movie Line_Num_Num_Car Line_Num_Num_Movie
    Line_Ord_Num_Car Line_Ord_Num_Movie Pie_Nom_Num_Car Pie_Nom_Num_Movie Pie_Num_Num_Car
    Pie_Num_Num_Movie Pie_Ord_Num_Car Pie_Ord_Num_Movie Scatter_Nom_Num_Car Scatter_Nom_Num_Movie
    Scatter_Num_Num_Car Scatter_Num_Num_Movie Scatter_Ord_Num_Car Scatter_Ord_Num_Movie
    Table_Nom_Num_Car Table_Nom_Num_Movie Table_Num_Num_Car Table_Num_Num_Movie Table_Ord_Num_Car
    Table_Ord_Num_Movie
  /WSFACTOR=Visualziation 5 Polynomial DataAttributeTypes 3 Polynomial Datasets 2 Polynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Visualziation) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(DataAttributeTypes) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Visualziation*DataAttributeTypes)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Visualziation DataAttributeTypes Datasets Visualziation*DataAttributeTypes
    Visualziation*Datasets DataAttributeTypes*Datasets Visualziation*DataAttributeTypes*Datasets.
```

General Linear Model

Notes

Output Created		05-SEP-2016 13:01:36
Comments		
Input	Data	C:\Users\Bahador\Desktop\Analysis\Anomalies_Accuracy.sav
	Active Dataset	DataSet10
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	18
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.

Notes

Syntax	GLM Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Num_Num_Car Bar_Num_Num_Movie Bar_Ord_Num_Car Bar_Ord_Num_Movie Line_Nom_Num_Car Line_Nom_Num_Movie Line_Num_Num_Car Line_Num_Num_Movie Line_Ord_Num_Car Line_Ord_Num_Movie Pie_Nom_Num_Car Pie_Nom_Num_Movie Pie_Num_Num_Car Pie_Num_Num_Movie Pie_Ord_Num_Car Pie_Ord_Num_Movie Scatter_Nom_Num_Car Scatter_Nom_Num_Movie Scatter_Num_Num_Car Scatter_Num_Num_Movie Scatter_Ord_Num_Car Scatter_Ord_Num_Movie Table_Nom_Num_Car Table_Nom_Num_Movie Table_Num_Num_Car Table_Num_Num_Movie Table_Ord_Num_Car Table_Ord_Num_Movie /WSFACTOR=Visualziation 5 Polynomial DataAttributeTypes 3 Polynomial Datasets 2 Polynomial /METHOD=SSTYPE(3) /EMMEANS=TABLES (OVERALL) /EMMEANS=TABLES (Visualziation) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (DataAttributeTypes) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Visualziation*DataAttributeTypes) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=Visualziation DataAttributeTypes Datasets Visualziation*DataAttributeTypes Visualziation*Datasets DataAttributeTypes*Datas

Notes

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Warnings

The HOMOGENEITY specification in the PRINT subcommand will be ignored because there are no between-subjects factors.

Within-Subjects Factors

Measure: MEASURE_1

Visualziation	DataAttributeTypes	Datasets	Dependent Variable
1	1	1	Bar_Nom_Num_Car
		2	Bar_Nom_Num_Movie
	2	1	Bar_Num_Num_Car
		2	Bar_Num_Num_Movie
	3	1	Bar_Ord_Num_Car
		2	Bar_Ord_Num_Movie
2	1	1	Line_Nom_Num_Car
		2	Line_Nom_Num_Movie
	2	1	Line_Num_Num_Car
		2	Line_Num_Num_Movie
	3	1	Line_Ord_Num_Car
		2	Line_Ord_Num_Movie
3	1	1	Pie_Nom_Num_Car
		2	Pie_Nom_Num_Movie

Within-Subjects Factors

Measure: MEASURE_1

Visualziation	DataAttributeTypes	Datasets	Dependent Variable
	2	1	Pie_Num_Num_Car
		2	Pie_Num_Num_Movie
	3	1	Pie_Ord_Num_Car
		2	Pie_Ord_Num_Movie
4	1	1	Scatter_Nom_Num_Car
		2	Scatter_Nom_Num_Movie
	2	1	Scatter_Num_Num_Car
		2	Scatter_Num_Num_Movie
	3	1	Scatter_Ord_Num_Car
		2	Scatter_Ord_Num_Movie
5	1	1	Table_Nom_Num_Car
		2	Table_Nom_Num_Movie
	2	1	Table_Num_Num_Car
		2	Table_Num_Num_Movie
	3	1	Table_Ord_Num_Car
		2	Table_Ord_Num_Movie

Descriptive Statistics

	Mean	Std. Deviation	N
Bar_Nom_Num_Car	77.7778	42.77926	18
Bar_Nom_Num_Movie	72.2222	46.08886	18
Bar_Num_Num_Car	66.6667	48.50713	18
Bar_Num_Num_Movie	77.7778	42.77926	18
Bar_Ord_Num_Car	72.2222	46.08886	18
Bar_Ord_Num_Movie	83.3333	38.34825	18
Line_Nom_Num_Car	94.4444	23.57023	18
Line_Nom_Num_Movie	88.8889	32.33808	18
Line_Num_Num_Car	50.0000	51.44958	18
Line_Num_Num_Movie	66.6667	48.50713	18
Line_Ord_Num_Car	61.1111	50.16313	18
Line_Ord_Num_Movie	55.5556	51.13100	18
Pie_Nom_Num_Car	83.3333	38.34825	18
Pie_Nom_Num_Movie	88.8889	32.33808	18
Pie_Num_Num_Car	61.1111	50.16313	18
Pie_Num_Num_Movie	55.5556	51.13100	18
Pie_Ord_Num_Car	66.6667	48.50713	18
Pie_Ord_Num_Movie	61.1111	50.16313	18
Scatter_Nom_Num_Car	83.3333	38.34825	18
Scatter_Nom_Num_Movie	94.4444	23.57023	18
Scatter_Num_Num_Car	83.3333	38.34825	18
Scatter_Num_Num_Movie	77.7778	42.77926	18
Scatter_Ord_Num_Car	77.7778	42.77926	18
Scatter_Ord_Num_Movie	83.3333	38.34825	18
Table_Nom_Num_Car	88.8889	32.33808	18
Table_Nom_Num_Movie	88.8889	32.33808	18
Table_Num_Num_Car	38.8889	50.16313	18
Table_Num_Num_Movie	55.5556	51.13100	18
Table_Ord_Num_Car	72.2222	46.08886	18
Table_Ord_Num_Movie	66.6667	48.50713	18

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Visualziation	Pillai's Trace	.503	3.543[b]	4.000	14.000
	Wilks' Lambda	.497	3.543[b]	4.000	14.000
	Hotelling's Trace	1.012	3.543[b]	4.000	14.000
	Roy's Largest Root	1.012	3.543[b]	4.000	14.000
DataAttributeTypes	Pillai's Trace	.538	9.333[b]	2.000	16.000
	Wilks' Lambda	.462	9.333[b]	2.000	16.000
	Hotelling's Trace	1.167	9.333[b]	2.000	16.000
	Roy's Largest Root	1.167	9.333[b]	2.000	16.000
Datasets	Pillai's Trace	.025	.435[b]	1.000	17.000
	Wilks' Lambda	.975	.435[b]	1.000	17.000
	Hotelling's Trace	.026	.435[b]	1.000	17.000
	Roy's Largest Root	.026	.435[b]	1.000	17.000
Visualziation * DataAttributeTypes	Pillai's Trace	.809	5.304[b]	8.000	10.000
	Wilks' Lambda	.191	5.304[b]	8.000	10.000
	Hotelling's Trace	4.243	5.304[b]	8.000	10.000
	Roy's Largest Root	4.243	5.304[b]	8.000	10.000
Visualziation * Datasets	Pillai's Trace	.018	.064[b]	4.000	14.000
	Wilks' Lambda	.982	.064[b]	4.000	14.000
	Hotelling's Trace	.018	.064[b]	4.000	14.000
	Roy's Largest Root	.018	.064[b]	4.000	14.000
DataAttributeTypes * Datasets	Pillai's Trace	.035	.288[b]	2.000	16.000
	Wilks' Lambda	.965	.288[b]	2.000	16.000
	Hotelling's Trace	.036	.288[b]	2.000	16.000
	Roy's Largest Root	.036	.288[b]	2.000	16.000
Visualziation * DataAttributeTypes * Datasets	Pillai's Trace	.401	.837[b]	8.000	10.000
	Wilks' Lambda	.599	.837[b]	8.000	10.000
	Hotelling's Trace	.669	.837[b]	8.000	10.000
	Roy's Largest Root	.669	.837[b]	8.000	10.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualziation	Pillai's Trace	.034	.503	14.172
	Wilks' Lambda	.034	.503	14.172
	Hotelling's Trace	.034	.503	14.172
	Roy's Largest Root	.034	.503	14.172
DataAttributeTypes	Pillai's Trace	.002	.538	18.667
	Wilks' Lambda	.002	.538	18.667
	Hotelling's Trace	.002	.538	18.667
	Roy's Largest Root	.002	.538	18.667
Datasets	Pillai's Trace	.518	.025	.435
	Wilks' Lambda	.518	.025	.435
	Hotelling's Trace	.518	.025	.435
	Roy's Largest Root	.518	.025	.435
Visualziation * DataAttributeTypes	Pillai's Trace	.008	.809	42.432
	Wilks' Lambda	.008	.809	42.432
	Hotelling's Trace	.008	.809	42.432
	Roy's Largest Root	.008	.809	42.432
Visualziation * Datasets	Pillai's Trace	.992	.018	.255
	Wilks' Lambda	.992	.018	.255
	Hotelling's Trace	.992	.018	.255
	Roy's Largest Root	.992	.018	.255
DataAttributeTypes * Datasets	Pillai's Trace	.754	.035	.576
	Wilks' Lambda	.754	.035	.576
	Hotelling's Trace	.754	.035	.576
	Roy's Largest Root	.754	.035	.576
Visualziation * DataAttributeTypes * Datasets	Pillai's Trace	.592	.401	6.695
	Wilks' Lambda	.592	.401	6.695
	Hotelling's Trace	.592	.401	6.695
	Roy's Largest Root	.592	.401	6.695

Multivariate Tests[a]

Effect		Observed Power[c]
Visualziation	Pillai's Trace	.724
	Wilks' Lambda	.724
	Hotelling's Trace	.724
	Roy's Largest Root	.724
DataAttributeTypes	Pillai's Trace	.948
	Wilks' Lambda	.948
	Hotelling's Trace	.948
	Roy's Largest Root	.948
Datasets	Pillai's Trace	.096
	Wilks' Lambda	.096
	Hotelling's Trace	.096
	Roy's Largest Root	.096
Visualziation * DataAttributeTypes	Pillai's Trace	.932
	Wilks' Lambda	.932
	Hotelling's Trace	.932
	Roy's Largest Root	.932
Visualziation * Datasets	Pillai's Trace	.059
	Wilks' Lambda	.059
	Hotelling's Trace	.059
	Roy's Largest Root	.059
DataAttributeTypes * Datasets	Pillai's Trace	.088
	Wilks' Lambda	.088
	Hotelling's Trace	.088
	Roy's Largest Root	.088
Visualziation * DataAttributeTypes * Datasets	Pillai's Trace	.216
	Wilks' Lambda	.216
	Hotelling's Trace	.216
	Roy's Largest Root	.216

a. Design: Intercept
Within Subjects Design: Visualziation + DataAttributeTypes + Datasets + Visualziation * DataAttributeTypes + Visualziation * Datasets + DataAttributeTypes * Datasets + Visualziation * ...

b. Exact statistic

c.

c. Computed using alpha = .05

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser
Visualziation	.440	12.669	9	.180	.703
DataAttributeTypes	.993	.119	2	.942	.993
Datasets	1.000	.000	0	.	1.000
Visualziation * DataAttributeTypes	.018	56.459	35	.016	.600
Visualziation * Datasets	.775	3.935	9	.916	.889
DataAttributeTypes * Datasets	.676	6.271	2	.043	.755
Visualziation * DataAttributeTypes * Datasets	.070	37.532	35	.384	.625

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Visualziation	.857	.250
DataAttributeTypes	1.000	.500
Datasets	1.000	1.000
Visualziation * DataAttributeTypes	.865	.125
Visualziation * Datasets	1.000	.250
DataAttributeTypes * Datasets	.813	.500
Visualziation * DataAttributeTypes * Datasets	.918	.125

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: Visualziation + DataAttributeTypes + Datasets + Visualziation * DataAttributeTypes + Visualziation * Datasets + DataAttributeTypes * Datasets + Visualziation * ...

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
Visualziation	Sphericity Assumed	16851.852	4	4212.963	3.032
	Greenhouse-Geisser	16851.852	2.813	5990.053	3.032
	Huynh-Feldt	16851.852	3.429	4915.183	3.032
	Lower-bound	16851.852	1.000	16851.852	3.032
Error(Visualziation)	Sphericity Assumed	94481.481	68	1389.434	
	Greenhouse-Geisser	94481.481	47.826	1975.517	
	Huynh-Feldt	94481.481	58.285	1621.026	
	Lower-bound	94481.481	17.000	5557.734	
DataAttributeTypes	Sphericity Assumed	49370.370	2	24685.185	10.765
	Greenhouse-Geisser	49370.370	1.985	24868.097	10.765
	Huynh-Feldt	49370.370	2.000	24685.185	10.765
	Lower-bound	49370.370	1.000	49370.370	10.765
Error(DataAttributeTypes)	Sphericity Assumed	77962.963	34	2293.028	
	Greenhouse-Geisser	77962.963	33.750	2310.019	
	Huynh-Feldt	77962.963	34.000	2293.028	
	Lower-bound	77962.963	17.000	4586.057	
Datasets	Sphericity Assumed	907.407	1	907.407	.435
	Greenhouse-Geisser	907.407	1.000	907.407	.435
	Huynh-Feldt	907.407	1.000	907.407	.435
	Lower-bound	907.407	1.000	907.407	.435
Error(Datasets)	Sphericity Assumed	35425.926	17	2083.878	
	Greenhouse-Geisser	35425.926	17.000	2083.878	
	Huynh-Feldt	35425.926	17.000	2083.878	
	Lower-bound	35425.926	17.000	2083.878	
Visualziation * DataAttributeTypes	Sphericity Assumed	26370.370	8	3296.296	2.406
	Greenhouse-Geisser	26370.370	4.800	5494.372	2.406

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualziation	Sphericity Assumed	.023	.151	12.129
	Greenhouse-Geisser	.041	.151	8.530
	Huynh-Feldt	.031	.151	10.396
	Lower-bound	.100	.151	3.032
Error(Visualziation)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeTypes	Sphericity Assumed	.000	.388	21.531
	Greenhouse-Geisser	.000	.388	21.372
	Huynh-Feldt	.000	.388	21.531
	Lower-bound	.004	.388	10.765
Error(DataAttributeTypes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets	Sphericity Assumed	.518	.025	.435
	Greenhouse-Geisser	.518	.025	.435
	Huynh-Feldt	.518	.025	.435
	Lower-bound	.518	.025	.435
Error(Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualziation * DataAttributeTypes	Sphericity Assumed	.018	.124	19.251
	Greenhouse-Geisser	.046	.124	11.549

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
Visualziation	Sphericity Assumed	.775
	Greenhouse-Geisser	.658
	Huynh-Feldt	.724
	Lower-bound	.376
Error(Visualziation)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeTypes	Sphericity Assumed	.984
	Greenhouse-Geisser	.983
	Huynh-Feldt	.984
	Lower-bound	.871
Error(DataAttributeTypes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets	Sphericity Assumed	.096
	Greenhouse-Geisser	.096
	Huynh-Feldt	.096
	Lower-bound	.096
Error(Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualziation * DataAttributeTypes	Sphericity Assumed	.883
	Greenhouse-Geisser	.724

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	26370.370	6.917	3812.367	2.406
	Lower-bound	26370.370	1.000	26370.370	2.406
Error (Visualziation*DataAttributeTypes)	Sphericity Assumed	186296.296	136	1369.826	
	Greenhouse-Geisser	186296.296	81.592	2283.269	
	Huynh-Feldt	186296.296	117.590	1584.287	
	Lower-bound	186296.296	17.000	10958.606	
Visualziation * Datasets	Sphericity Assumed	851.852	4	212.963	.086
	Greenhouse-Geisser	851.852	3.558	239.425	.086
	Huynh-Feldt	851.852	4.000	212.963	.086
	Lower-bound	851.852	1.000	851.852	.086
Error (Visualziation*Datasets)	Sphericity Assumed	167814.815	68	2467.865	
	Greenhouse-Geisser	167814.815	60.484	2774.511	
	Huynh-Feldt	167814.815	68.000	2467.865	
	Lower-bound	167814.815	17.000	9871.460	
DataAttributeTypes * Datasets	Sphericity Assumed	1148.148	2	574.074	.245
	Greenhouse-Geisser	1148.148	1.510	760.218	.245
	Huynh-Feldt	1148.148	1.626	706.149	.245
	Lower-bound	1148.148	1.000	1148.148	.245
Error (DataAttributeTypes*Datasets)	Sphericity Assumed	79518.519	34	2338.780	
	Greenhouse-Geisser	79518.519	25.675	3097.133	
	Huynh-Feldt	79518.519	27.641	2876.855	
	Lower-bound	79518.519	17.000	4677.560	
Visualziation * DataAttributeTypes * Datasets	Sphericity Assumed	7925.926	8	990.741	.582
	Greenhouse-Geisser	7925.926	5.004	1583.958	.582
	Huynh-Feldt	7925.926	7.342	1079.604	.582
	Lower-bound	7925.926	1.000	7925.926	.582
Error (Visualziation*DataAttributeTypes*Datasets)	Sphericity Assumed	231407.407	136	1701.525	
	Greenhouse-Geisser	231407.407	85.066	2720.332	
	Huynh-Feldt	231407.407	124.806	1854.141	
	Lower-bound	231407.407	17.000	13612.200	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.025	.124	16.645
	Lower-bound	.139	.124	2.406
Error (Visualziation*DataAttributeTypes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualziation * Datasets	Sphericity Assumed	.986	.005	.345
	Greenhouse-Geisser	.980	.005	.307
	Huynh-Feldt	.986	.005	.345
	Lower-bound	.772	.005	.086
Error (Visualziation*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeTypes * Datasets	Sphericity Assumed	.784	.014	.491
	Greenhouse-Geisser	.722	.014	.371
	Huynh-Feldt	.738	.014	.399
	Lower-bound	.627	.014	.245
Error (DataAttributeTypes*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualziation * DataAttributeTypes * Datasets	Sphericity Assumed	.791	.033	4.658
	Greenhouse-Geisser	.714	.033	2.914
	Huynh-Feldt	.777	.033	4.275
	Lower-bound	.456	.033	.582
Error (Visualziation*DataAttributeTypes*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
	Huynh-Feldt	.842
	Lower-bound	.310
Error (Visualziation*DataAttributeTypes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualziation * Datasets	Sphericity Assumed	.067
	Greenhouse-Geisser	.066
	Huynh-Feldt	.067
	Lower-bound	.059
Error (Visualziation*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeTypes * Datasets	Sphericity Assumed	.085
	Greenhouse-Geisser	.081
	Huynh-Feldt	.082
	Lower-bound	.075
Error (DataAttributeTypes*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualziation * DataAttributeTypes * Datasets	Sphericity Assumed	.261
	Greenhouse-Geisser	.204
	Huynh-Feldt	.249
	Lower-bound	.111
Error (Visualziation*DataAttributeTypes*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Type III Sum of Squares	df
Visualziation	Linear			9.259	1
	Quadratic			165.344	1
	Cubic			12675.926	1
	Order 4			4001.323	1
Error(Visualziation)	Linear			28490.741	17
	Quadratic			20191.799	17
	Cubic			13824.074	17
	Order 4			31974.868	17
DataAttributeTypes		Linear		23361.111	1
		Quadratic		26009.259	1
Error(DataAttributeTypes)		Linear		39138.889	17
		Quadratic		38824.074	17
Datasets			Linear	907.407	1
Error(Datasets)			Linear	35425.926	17
Visualziation * DataAttributeTypes	Linear	Linear		680.556	1
		Quadratic		4449.074	1
	Quadratic	Linear		3581.349	1
		Quadratic		558.862	1
	Cubic	Linear		9388.889	1
		Quadratic		6685.185	1
	Order 4	Linear		71.429	1
		Quadratic		955.026	1
Error (Visualziation*DataAttributeTypes)	Linear	Linear		15069.444	17
		Quadratic		13800.926	17
	Quadratic	Linear		30525.794	17
		Quadratic		36762.566	17
	Cubic	Linear		28611.111	17
		Quadratic		21314.815	17
	Order 4	Linear		17071.429	17
		Quadratic		23140.212	17
Visualziation * Datasets	Linear		Linear	9.259	1
	Quadratic		Linear	535.714	1
	Cubic		Linear	83.333	1
	Order 4		Linear	223.545	1

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Mean Square	F
Visualziation	Linear			9.259	.006
	Quadratic			165.344	.139
	Cubic			12675.926	15.588
	Order 4			4001.323	2.127
Error(Visualziation)	Linear			1675.926	
	Quadratic			1187.753	
	Cubic			813.181	
	Order 4			1880.875	
DataAttributeTypes		Linear		23361.111	10.147
		Quadratic		26009.259	11.389
Error(DataAttributeTypes)		Linear		2302.288	
		Quadratic		2283.769	
Datasets			Linear	907.407	.435
Error(Datasets)			Linear	2083.878	
Visualziation * DataAttributeTypes	Linear	Linear		680.556	.768
		Quadratic		4449.074	5.480
	Quadratic	Linear		3581.349	1.994
		Quadratic		558.862	.258
	Cubic	Linear		9388.889	5.579
		Quadratic		6685.185	5.332
	Order 4	Linear		71.429	.071
		Quadratic		955.026	.702
Error (Visualziation*DataAttributeTypes)	Linear	Linear		886.438	
		Quadratic		811.819	
	Quadratic	Linear		1795.635	
		Quadratic		2162.504	
	Cubic	Linear		1683.007	
		Quadratic		1253.813	
	Order 4	Linear		1004.202	
		Quadratic		1361.189	
Visualziation * Datasets	Linear		Linear	9.259	.003
	Quadratic		Linear	535.714	.179
	Cubic		Linear	83.333	.036
	Order 4		Linear	223.545	.118

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Sig.	Partial Eta Squared
Visualziation	Linear			.942	.000
	Quadratic			.714	.008
	Cubic			.001	.478
	Order 4			.163	.111
Error(Visualziation)	Linear				
	Quadratic				
	Cubic				
	Order 4				
DataAttributeTypes		Linear		.005	.374
		Quadratic		.004	.401
Error(DataAttributeTypes)		Linear			
		Quadratic			
Datasets			Linear	.518	.025
Error(Datasets)			Linear		
Visualziation * DataAttributeTypes	Linear	Linear		.393	.043
		Quadratic		.032	.244
	Quadratic	Linear		.176	.105
		Quadratic		.618	.015
	Cubic	Linear		.030	.247
		Quadratic		.034	.239
	Order 4	Linear		.793	.004
		Quadratic		.414	.040
Error (Visualziation*DataAttributeTypes)	Linear	Linear			
		Quadratic			
	Quadratic	Linear			
		Quadratic			
	Cubic	Linear			
		Quadratic			
	Order 4	Linear			
		Quadratic			
Visualziation * Datasets	Linear		Linear	.954	.000
	Quadratic		Linear	.677	.010
	Cubic		Linear	.852	.002
	Order 4		Linear	.735	.007

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Noncent. Parameter
Visualziation	Linear			.006
	Quadratic			.139
	Cubic			15.588
	Order 4			2.127
Error(Visualziation)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataAttributeTypes		Linear		10.147
		Quadratic		11.389
Error(DataAttributeTypes)		Linear		
		Quadratic		
Datasets			Linear	.435
Error(Datasets)			Linear	
Visualziation * DataAttributeTypes	Linear	Linear		.768
		Quadratic		5.480
	Quadratic	Linear		1.994
		Quadratic		.258
	Cubic	Linear		5.579
		Quadratic		5.332
	Order 4	Linear		.071
		Quadratic		.702
Error (Visualziation*DataAttributeTypes)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualziation * Datasets	Linear		Linear	.003
	Quadratic		Linear	.179
	Cubic		Linear	.036
	Order 4		Linear	.118

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Observed Power[a]
Visualziation	Linear			.051
	Quadratic			.064
	Cubic			.961
	Order 4			.280
Error(Visualziation)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataAttributeTypes		Linear		.851
		Quadratic		.889
Error(DataAttributeTypes)		Linear		
		Quadratic		
Datasets			Linear	.096
Error(Datasets)			Linear	
Visualziation * DataAttributeTypes	Linear	Linear		.131
		Quadratic		.598
	Quadratic	Linear		.266
		Quadratic		.077
	Cubic	Linear		.605
		Quadratic		.586
	Order 4	Linear		.057
		Quadratic		.124
Error (Visualziation*DataAttributeTypes)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualziation * Datasets	Linear		Linear	.050
	Quadratic		Linear	.069
	Cubic		Linear	.054
	Order 4		Linear	.062

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Type III Sum of Squares	df
Error (Visualziation*Datasets)	Linear		Linear	45157.407	17
	Quadratic		Linear	50773.810	17
	Cubic		Linear	39750.000	17
	Order 4		Linear	32133.598	17
DataAttributeTypes * Datasets		Linear	Linear	27.778	1
		Quadratic	Linear	1120.370	1
Error (DataAttributeTypes*Datasets)		Linear	Linear	40472.222	17
		Quadratic	Linear	39046.296	17
Visualziation * DataAttributeTypes * Datasets	Linear	Linear	Linear	1125.000	1
		Quadratic	Linear	115.741	1
	Quadratic	Linear	Linear	803.571	1
		Quadratic	Linear	1458.333	1
	Cubic	Linear	Linear	55.556	1
		Quadratic	Linear	4166.667	1
	Order 4	Linear	Linear	71.429	1
		Quadratic	Linear	129.630	1
Error (Visualziation*DataAttributeTypes*Datasets)	Linear	Linear	Linear	11625.000	17
		Quadratic	Linear	30467.593	17
	Quadratic	Linear	Linear	19732.143	17
		Quadratic	Linear	19910.714	17
	Cubic	Linear	Linear	40944.444	17
		Quadratic	Linear	41500.000	17
	Order 4	Linear	Linear	42642.857	17
		Quadratic	Linear	24584.656	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Mean Square	F
Error (Visualziation*Datasets)	Linear		Linear	2656.318	
	Quadratic		Linear	2986.695	
	Cubic		Linear	2338.235	
	Order 4		Linear	1890.212	
DataAttributeTypes * Datasets		Linear	Linear	27.778	.012
		Quadratic	Linear	1120.370	.488
Error (DataAttributeTypes*Datasets)		Linear	Linear	2380.719	
		Quadratic	Linear	2296.841	
Visualziation * DataAttributeTypes * Datasets	Linear	Linear	Linear	1125.000	1.645
		Quadratic	Linear	115.741	.065
	Quadratic	Linear	Linear	803.571	.692
		Quadratic	Linear	1458.333	1.245
	Cubic	Linear	Linear	55.556	.023
		Quadratic	Linear	4166.667	1.707
	Order 4	Linear	Linear	71.429	.028
		Quadratic	Linear	129.630	.090
Error (Visualziation*DataAttributeTypes*Datasets)	Linear	Linear	Linear	683.824	
		Quadratic	Linear	1792.211	
	Quadratic	Linear	Linear	1160.714	
		Quadratic	Linear	1171.218	
	Cubic	Linear	Linear	2408.497	
		Quadratic	Linear	2441.176	
	Order 4	Linear	Linear	2508.403	
		Quadratic	Linear	1446.156	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Sig.	Partial Eta Squared
Error (Visualziation*Datasets)	Linear		Linear		
	Quadratic		Linear		
	Cubic		Linear		
	Order 4		Linear		
DataAttributeTypes * Datasets		Linear	Linear	.915	.001
		Quadratic	Linear	.494	.028
Error (DataAttributeTypes*Datasets)		Linear	Linear		
		Quadratic	Linear		
Visualziation * DataAttributeTypes * Datasets	Linear	Linear	Linear	.217	.088
		Quadratic	Linear	.802	.004
	Quadratic	Linear	Linear	.417	.039
		Quadratic	Linear	.280	.068
	Cubic	Linear	Linear	.881	.001
		Quadratic	Linear	.209	.091
	Order 4	Linear	Linear	.868	.002
		Quadratic	Linear	.768	.005
Error (Visualziation*DataAttributeTypes*Datasets)	Linear	Linear	Linear		
		Quadratic	Linear		
	Quadratic	Linear	Linear		
		Quadratic	Linear		
	Cubic	Linear	Linear		
		Quadratic	Linear		
	Order 4	Linear	Linear		
		Quadratic	Linear		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Noncent. Parameter
Error (Visualziation*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataAttributeTypes * Datasets		Linear	Linear	.012
		Quadratic	Linear	.488
Error (DataAttributeTypes*Datasets)		Linear	Linear	
		Quadratic	Linear	
Visualziation * DataAttributeTypes * Datasets	Linear	Linear	Linear	1.645
		Quadratic	Linear	.065
	Quadratic	Linear	Linear	.692
		Quadratic	Linear	1.245
	Cubic	Linear	Linear	.023
		Quadratic	Linear	1.707
	Order 4	Linear	Linear	.028
		Quadratic	Linear	.090
Error (Visualziation*DataAttributeTypes*Datasets)	Linear	Linear	Linear	
		Quadratic	Linear	
	Quadratic	Linear	Linear	
		Quadratic	Linear	
	Cubic	Linear	Linear	
		Quadratic	Linear	
	Order 4	Linear	Linear	
		Quadratic	Linear	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualziation	DataAttributeTypes	Datasets	Observed Power[a]
Error (Visualziation*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataAttributeTypes * Datasets		Linear	Linear	.051
		Quadratic	Linear	.101
Error (DataAttributeTypes*Datasets)		Linear	Linear	
		Quadratic	Linear	
Visualziation * DataAttributeTypes * Datasets	Linear	Linear	Linear	.228
		Quadratic	Linear	.057
	Quadratic	Linear	Linear	.123
		Quadratic	Linear	.184
	Cubic	Linear	Linear	.052
		Quadratic	Linear	.234
	Order 4	Linear	Linear	.053
		Quadratic	Linear	.059
Error (Visualziation*DataAttributeTypes*Datasets)	Linear	Linear	Linear	
		Quadratic	Linear	
	Quadratic	Linear	Linear	
		Quadratic	Linear	
	Cubic	Linear	Linear	
		Quadratic	Linear	
	Order 4	Linear	Linear	
		Quadratic	Linear	

a. Computed using alpha = .05

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	2889351.852	1	2889351.852	582.566	.000	.972
Error	84314.815	17	4959.695			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	582.566	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

		95% Confidence Interval	
Mean	Std. Error	Lower Bound	Upper Bound
73.148	3.031	66.754	79.542

2. Visualziation

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
Visualziation	Mean	Std. Error	Lower Bound	Upper Bound
1	75.000	4.905	64.652	85.348
2	69.444	3.870	61.279	77.610
3	69.444	4.716	59.495	79.394
4	83.333	3.811	75.293	91.374
5	68.519	4.646	58.716	78.321

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualziation	(J) Visualziation	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]... Lower Bound
1	2	5.556	5.717	1.000	-12.866
	3	5.556	5.219	1.000	-11.261
	4	-8.333	7.034	1.000	-30.999
	5	6.481	5.413	1.000	-10.962
2	1	-5.556	5.717	1.000	-23.977
	3	.000	4.858	1.000	-15.655
	4	-13.889*	4.098	.035	-27.095
	5	.926	3.922	1.000	-11.712
3	1	-5.556	5.219	1.000	-22.372
	2	.000	4.858	1.000	-15.655
	4	-13.889	5.432	.204	-31.392
	5	.926	3.428	1.000	-10.120
4	1	8.333	7.034	1.000	-14.333
	2	13.889*	4.098	.035	.683
	3	13.889	5.432	.204	-3.614
	5	14.815	4.646	.054	-.156
5	1	-6.481	5.413	1.000	-23.925
	2	-.926	3.922	1.000	-13.564
	3	-.926	3.428	1.000	-11.972
	4	-14.815	4.646	.054	-29.786

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualziation	(J) Visualziation	95% Confidence Interval for [b]... Upper Bound
1	2	23.977
	3	22.372
	4	14.333
	5	23.925
2	1	12.866
	3	15.655
	4	-.683
	5	13.564
3	1	11.261
	2	15.655
	4	3.614
	5	11.972
4	1	30.999
	2	27.095
	3	31.392
	5	29.786
5	1	10.962
	2	11.712
	3	10.120
	4	.156

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	.503	3.543[a]	4.000	14.000	.034	.503
Wilks' lambda	.497	3.543[a]	4.000	14.000	.034	.503
Hotelling's trace	1.012	3.543[a]	4.000	14.000	.034	.503
Roy's largest root	1.012	3.543[a]	4.000	14.000	.034	.503

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	14.172	.724
Wilks' lambda	14.172	.724
Hotelling's trace	14.172	.724
Roy's largest root	14.172	.724

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

a. Exact statistic

b. Computed using alpha = .05

3. DataAttributeTypes

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
DataAttributeTypes	Mean	Std. Error	Lower Bound	Upper Bound
1	86.111	4.724	76.145	96.077
2	63.333	4.501	53.836	72.830
3	70.000	3.234	63.177	76.823

Pairwise Comparisons

Measure: MEASURE_1

(I) DataAttributeTypes	(J) DataAttributeTypes	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]... Lower Bound
1	2	22.778*	5.227	.001	8.900
	3	16.111*	5.058	.016	2.683
2	1	-22.778*	5.227	.001	-36.656
	3	-6.667	4.851	.562	-19.545
3	1	-16.111*	5.058	.016	-29.539
	2	6.667	4.851	.562	-6.212

Pairwise Comparisons

Measure: MEASURE_1

(I) DataAttributeTypes	(J) DataAttributeTypes	95% Confidence Interval for [b]... Upper Bound
1	2	36.656
	3	29.539
2	1	-8.900
	3	6.212
3	1	-2.683
	2	19.545

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	.538	9.333[a]	2.000	16.000	.002	.538
Wilks' lambda	.462	9.333[a]	2.000	16.000	.002	.538
Hotelling's trace	1.167	9.333[a]	2.000	16.000	.002	.538
Roy's largest root	1.167	9.333[a]	2.000	16.000	.002	.538

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	18.667	.948
Wilks' lambda	18.667	.948
Hotelling's trace	18.667	.948
Roy's largest root	18.667	.948

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

a. Exact statistic

b. Computed using alpha = .05

4. Visualziation * DataAttributeTypes

Measure: MEASURE_1

Visualziation	DataAttributeTypes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	75.000	7.287	59.625	90.375
	2	72.222	7.256	56.913	87.531
	3	77.778	7.256	62.469	93.087
2	1	91.667	4.519	82.132	101.202
	2	58.333	7.287	42.958	73.708
	3	58.333	6.063	45.541	71.126
3	1	86.111	6.771	71.826	100.396
	2	58.333	9.262	38.792	77.874
	3	63.889	5.432	52.429	75.349
4	1	88.889	5.042	78.252	99.526
	2	80.556	5.912	68.083	93.028
	3	80.556	7.162	65.446	95.665
5	1	88.889	7.622	72.808	104.970
	2	47.222	7.532	31.330	63.114
	3	69.444	8.224	52.094	86.795