```
GET
  FILE='C:\Users\Bahador\Desktop\Analysis\Filter\Filter_Time.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
GLM Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Num_Num_Car Bar_Num_Num_Movie Bar_Or
d_Num_Car
    Bar_Ord_Num_Movie Line_Nom_Num_Car Line_Nom_Num_Movie Line_Num_Num_Car Lin
e_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 Sc
atter_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_Movi
e Table_Ord_Num_Car
    Table_Ord_Num_Movie
  /WSFACTOR=Visualization 5 Polynomial DataVisualizationAttributes 3 Polynomia
l Datasets 2
    Polynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Visualization) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(DataVisualizationAttributes) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Visualization*DataVisualizationAttributes)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Visualization DataVisualizationAttributes Datasets
    Visualization*DataVisualizationAttributes Visualization*Datasets
    DataVisualizationAttributes*Datasets Visualization*DataVisualizationAttrib
utes*Datasets.
```

General Linear Model

Notes

Output Created		07-SEP-2016 12:56:41
Comments		
Input	Data	C:\Users\Bahador\Desktop\Analysis\Filter\Filter_Time.sav
	Active Dataset	DataSet1
	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=Visualization 5 Polynomial DataVisualizationAttributes 3 Polynomial Datasets 2 Polynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Visualization) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(DataVisualizationAttributes) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Visualization*DataVisualizationAttributes)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)

/WSDESIGN=Visualization DataVisualizationAttributes Datasets

Visualization*DataVisualizationAttributes
Visualization*Datasets

Notes

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

[DataSet1] C:\Users\Bahador\Desktop\Analysis\Filter\Filter_Time.sav

Warnings

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

Within-Subjects Factors

Measure: MEASURE_1

Visualization	DataVisualizationAttributes	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

Visualization	DataVisualizationAttributes	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	18.3889	12.21445	18
Bar_Nom_Num_Movie	17.8889	6.91876	18
Bar_Num_Num_Car	26.7222	19.86663	18
Bar_Num_Num_Movie	18.7222	14.03695	18
Bar_Ord_Num_Car	15.2778	7.86508	18
Bar_Ord_Num_Movie	15.7222	6.99416	18
Line_Nom_Num_Car	26.3889	18.67411	18
Line_Nom_Num_Movie	30.7778	16.86471	18
Line_Num_Num_Car	36.6667	31.07865	18
Line_Num_Num_Movie	34.7778	30.73139	18
Line_Ord_Num_Car	36.3889	29.94336	18
Line_Ord_Num_Movie	27.4444	17.12660	18
Pie_Nom_Num_Car	27.5556	19.91223	18
Pie_Nom_Num_Movie	29.8889	28.18195	18
Pie_Num_Num_Car	28.0000	18.94574	18
Pie_Num_Num_Movie	35.3333	26.80869	18
Pie_Ord_Num_Car	24.8333	14.78175	18
Pie_Ord_Num_Movie	35.6111	28.76096	18
Scatter_Nom_Num_Car	27.6111	22.99652	18
Scatter_Nom_Num_Movie	25.6111	9.03027	18
Scatter_Num_Num_Car	29.3333	16.52805	18
Scatter_Num_Num_Movie	38.0000	33.68889	18
Scatter_Ord_Num_Car	26.1667	18.04325	18
Scatter_Ord_Num_Movie	32.5556	17.42285	18
Table_Nom_Num_Car	14.8889	9.14516	18
Table_Nom_Num_Movie	15.6667	7.82154	18
Table_Num_Num_Car	22.8889	14.10002	18
Table_Num_Num_Movie	24.2222	13.61900	18
Table_Ord_Num_Car	19.2222	12.22608	18
Table_Ord_Num_Movie	24.5000	21.11384	18

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Visualization	Pillai's Trace	.693	7.900[b]	4.000	14.000
	Wilks' Lambda	.307	7.900[b]	4.000	14.000
	Hotelling's Trace	2.257	7.900[b]	4.000	14.000
	Roy's Largest Root	2.257	7.900[b]	4.000	14.000
DataVisualizationAttributes	Pillai's Trace	.195	1.937[b]	2.000	16.000
	Wilks' Lambda	.805	1.937[b]	2.000	16.000
	Hotelling's Trace	.242	1.937[b]	2.000	16.000
	Roy's Largest Root	.242	1.937[b]	2.000	16.000
Datasets	Pillai's Trace	.064	1.161[b]	1.000	17.000
	Wilks' Lambda	.936	1.161[b]	1.000	17.000
	Hotelling's Trace	.068	1.161[b]	1.000	17.000
	Roy's Largest Root	.068	1.161[b]	1.000	17.000
Visualization * DataVisualizationAttributes	Pillai's Trace	.498	1.240[b]	8.000	10.000
	Wilks' Lambda	.502	1.240[b]	8.000	10.000
	Hotelling's Trace	.992	1.240[b]	8.000	10.000
	Roy's Largest Root	.992	1.240[b]	8.000	10.000
Visualization * Datasets	Pillai's Trace	.235	1.076[b]	4.000	14.000
	Wilks' Lambda	.765	1.076[b]	4.000	14.000
	Hotelling's Trace	.307	1.076[b]	4.000	14.000
	Roy's Largest Root	.307	1.076[b]	4.000	14.000
DataVisualizationAttributes * Datasets	Pillai's Trace	.008	.068[b]	2.000	16.000
	Wilks' Lambda	.992	.068[b]	2.000	16.000
	Hotelling's Trace	.009	.068[b]	2.000	16.000
	Roy's Largest Root	.009	.068[b]	2.000	16.000
Visualization * DataVisualizationAttributes * Datasets	Pillai's Trace	.334	.627[b]	8.000	10.000
	Wilks' Lambda	.666	.627[b]	8.000	10.000
	Hotelling's Trace	.502	.627[b]	8.000	10.000
	Roy's Largest Root	.502	.627[b]	8.000	10.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Pillai's Trace	.002	.693	31.602
	Wilks' Lambda	.002	.693	31.602
	Hotelling's Trace	.002	.693	31.602
	Roy's Largest Root	.002	.693	31.602
DataVisualizationAttributes	Pillai's Trace	.176	.195	3.874
	Wilks' Lambda	.176	.195	3.874
	Hotelling's Trace	.176	.195	3.874
	Roy's Largest Root	.176	.195	3.874
Datasets	Pillai's Trace	.296	.064	1.161
	Wilks' Lambda	.296	.064	1.161
	Hotelling's Trace	.296	.064	1.161
	Roy's Largest Root	.296	.064	1.161
Visualization * DataVisualizationAttributes	Pillai's Trace	.368	.498	9.918
	Wilks' Lambda	.368	.498	9.918
	Hotelling's Trace	.368	.498	9.918
	Roy's Largest Root	.368	.498	9.918
Visualization * Datasets	Pillai's Trace	.405	.235	4.305
	Wilks' Lambda	.405	.235	4.305
	Hotelling's Trace	.405	.235	4.305
	Roy's Largest Root	.405	.235	4.305
DataVisualizationAttributes * Datasets	Pillai's Trace	.934	.008	.137
	Wilks' Lambda	.934	.008	.137
	Hotelling's Trace	.934	.008	.137
	Roy's Largest Root	.934	.008	.137
Visualization * DataVisualizationAttributes * Datasets	Pillai's Trace	.740	.334	5.015
	Wilks' Lambda	.740	.334	5.015
	Hotelling's Trace	.740	.334	5.015
	Roy's Largest Root	.740	.334	5.015

Multivariate Tests[a]

Effect		Observed Power[c]
Visualization	Pillai's Trace	.979
	Wilks' Lambda	.979
	Hotelling's Trace	.979
	Roy's Largest Root	.979
DataVisualizationAttributes	Pillai's Trace	.342
	Wilks' Lambda	.342
	Hotelling's Trace	.342
	Roy's Largest Root	.342
Datasets	Pillai's Trace	.174
	Wilks' Lambda	.174
	Hotelling's Trace	.174
	Roy's Largest Root	.174
Visualization * DataVisualizationAttributes	Pillai's Trace	.315
	Wilks' Lambda	.315
	Hotelling's Trace	.315
	Roy's Largest Root	.315
Visualization * Datasets	Pillai's Trace	.254
	Wilks' Lambda	.254
	Hotelling's Trace	.254
	Roy's Largest Root	.254
DataVisualizationAttributes * Datasets	Pillai's Trace	.059
	Wilks' Lambda	.059
	Hotelling's Trace	.059
	Roy's Largest Root	.059
Visualization * DataVisualizationAttributes * Datasets	Pillai's Trace	.168
	Wilks' Lambda	.168
	Hotelling's Trace	.168
	Roy's Largest Root	.168

a. Design: Intercept
  Within Subjects Design: Visualization + DataVisualizationAttributes + Datasets + Visualization * DataVisualizationAttributes + Visualization * Datasets + DataVisualizationAttributes * Datasets + Visualization * DataVisualizationAttributes * Datasets

b. Exact statistic

c.

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser
Visualization	.419	13.402	9	.147	.716
DataVisualizationAttributes	.786	3.844	2	.146	.824
Datasets	1.000	.000	0	.	1.000
Visualization * DataVisualizationAttributes	.036	46.906	35	.101	.597
Visualization * Datasets	.484	11.197	9	.265	.736
DataVisualizationAttributes * Datasets	.963	.608	2	.738	.964
Visualization * DataVisualizationAttributes * Datasets	.005	75.649	35	.000	.487

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Visualization	.877	.250
DataVisualizationAttributes	.901	.500
Datasets	1.000	1.000
Visualization * DataVisualizationAttributes	.859	.125
Visualization * Datasets	.907	.250
DataVisualizationAttributes * Datasets	1.000	.500
Visualization * DataVisualizationAttributes * Datasets	.650	.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: Visualization + DataVisualizationAttributes + Datasets + Visualization * DataVisualizationAttributes + Visualization * Datasets + DataVisualizationAttributes * Datasets + Visualization * DataVisualizationAttributes * Datasets

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
Visualization	Sphericity Assumed	16701.456	4	4175.364	10.386
	Greenhouse-Geisser	16701.456	2.865	5830.430	10.386
	Huynh-Feldt	16701.456	3.506	4763.425	10.386
	Lower-bound	16701.456	1.000	16701.456	10.386
Error(Visualization)	Sphericity Assumed	27338.211	68	402.033	
	Greenhouse-Geisser	27338.211	48.697	561.394	
	Huynh-Feldt	27338.211	59.605	458.655	
	Lower-bound	27338.211	17.000	1608.130	
DataVisualizationAttributes	Sphericity Assumed	3297.870	2	1648.935	2.492
	Greenhouse-Geisser	3297.870	1.648	2001.116	2.492
	Huynh-Feldt	3297.870	1.802	1830.116	2.492
	Lower-bound	3297.870	1.000	3297.870	2.492
Error (DataVisualizationAttributes)	Sphericity Assumed	22495.996	34	661.647	
	Greenhouse-Geisser	22495.996	28.016	802.962	
	Huynh-Feldt	22495.996	30.634	734.347	
	Lower-bound	22495.996	17.000	1323.294	
Datasets	Sphericity Assumed	417.824	1	417.824	1.161
	Greenhouse-Geisser	417.824	1.000	417.824	1.161
	Huynh-Feldt	417.824	1.000	417.824	1.161
	Lower-bound	417.824	1.000	417.824	1.161
Error(Datasets)	Sphericity Assumed	6120.209	17	360.012	
	Greenhouse-Geisser	6120.209	17.000	360.012	
	Huynh-Feldt	6120.209	17.000	360.012	
	Lower-bound	6120.209	17.000	360.012	
Visualization * DataVisualizationAttributes	Sphericity Assumed	1025.833	8	128.229	.489
	Greenhouse-Geisser	1025.833	4.777	214.739	.489

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Sphericity Assumed	.000	.379	41.543
	Greenhouse-Geisser	.000	.379	29.750
	Huynh-Feldt	.000	.379	36.414
	Lower-bound	.005	.379	10.386
Error(Visualization)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataVisualizationAttributes	Sphericity Assumed	.098	.128	4.984
	Greenhouse-Geisser	.109	.128	4.107
	Huynh-Feldt	.104	.128	4.491
	Lower-bound	.133	.128	2.492
Error (DataVisualizationAttributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets	Sphericity Assumed	.296	.064	1.161
	Greenhouse-Geisser	.296	.064	1.161
	Huynh-Feldt	.296	.064	1.161
	Lower-bound	.296	.064	1.161
Error(Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataVisualizationAttributes	Sphericity Assumed	.862	.028	3.914
	Greenhouse-Geisser	.775	.028	2.337

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
Visualization	Sphericity Assumed	1.000
	Greenhouse-Geisser	.997
	Huynh-Feldt	.999
	Lower-bound	.859
Error(Visualization)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataVisualizationAttributes	Sphericity Assumed	.466
	Greenhouse-Geisser	.418
	Huynh-Feldt	.439
	Lower-bound	.319
Error (DataVisualizationAttributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets	Sphericity Assumed	.174
	Greenhouse-Geisser	.174
	Huynh-Feldt	.174
	Lower-bound	.174
Error(Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataVisualizationAttributes	Sphericity Assumed	.221
	Greenhouse-Geisser	.172

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	1025.833	6.871	149.290	.489
	Lower-bound	1025.833	1.000	1025.833	.489
Error (Visualization*DataVisualizationAttributes)	Sphericity Assumed	35642.300	136	262.076	
	Greenhouse-Geisser	35642.300	81.211	438.884	
	Huynh-Feldt	35642.300	116.814	305.121	
	Lower-bound	35642.300	17.000	2096.606	
Visualization * Datasets	Sphericity Assumed	1830.500	4	457.625	1.575
	Greenhouse-Geisser	1830.500	2.944	621.738	1.575
	Huynh-Feldt	1830.500	3.628	504.543	1.575
	Lower-bound	1830.500	1.000	1830.500	1.575
Error (Visualization*Datasets)	Sphericity Assumed	19763.300	68	290.637	
	Greenhouse-Geisser	19763.300	50.051	394.864	
	Huynh-Feldt	19763.300	61.677	320.435	
	Lower-bound	19763.300	17.000	1162.547	
DataVisualizationAttributes * Datasets	Sphericity Assumed	76.937	2	38.469	.066
	Greenhouse-Geisser	76.937	1.928	39.903	.066
	Huynh-Feldt	76.937	2.000	38.469	.066
	Lower-bound	76.937	1.000	76.937	.066
Error (DataVisualizationAttributes*Datasets)	Sphericity Assumed	19712.930	34	579.792	
	Greenhouse-Geisser	19712.930	32.778	601.411	
	Huynh-Feldt	19712.930	34.000	579.792	
	Lower-bound	19712.930	17.000	1159.584	
Visualization * DataVisualizationAttributes * Datasets	Sphericity Assumed	2110.211	8	263.776	.918
	Greenhouse-Geisser	2110.211	3.895	541.805	.918
	Huynh-Feldt	2110.211	5.197	406.055	.918
	Lower-bound	2110.211	1.000	2110.211	.918
Error (Visualization*DataVisualizationAttributes*Datasets)	Sphericity Assumed	39068.589	136	287.269	
	Greenhouse-Geisser	39068.589	66.211	590.059	
	Huynh-Feldt	39068.589	88.347	442.219	
	Lower-bound	39068.589	17.000	2298.152	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.838	.028	3.362
	Lower-bound	.494	.028	.489
Error (Visualization*DataVisualizationAttributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * Datasets	Sphericity Assumed	.191	.085	6.298
	Greenhouse-Geisser	.208	.085	4.636
	Huynh-Feldt	.197	.085	5.713
	Lower-bound	.227	.085	1.575
Error (Visualization*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataVisualizationAttributes * Datasets	Sphericity Assumed	.936	.004	.133
	Greenhouse-Geisser	.931	.004	.128
	Huynh-Feldt	.936	.004	.133
	Lower-bound	.800	.004	.066
Error (DataVisualizationAttributes*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataVisualizationAttributes * Datasets	Sphericity Assumed	.504	.051	7.346
	Greenhouse-Geisser	.457	.051	3.576
	Huynh-Feldt	.476	.051	4.772
	Lower-bound	.351	.051	.918
Error (Visualization*DataVisualizationAttributes*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
	Huynh-Feldt	.204
	Lower-bound	.101
Error (Visualization*DataVisualizationAttributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * Datasets	Sphericity Assumed	.461
	Greenhouse-Geisser	.386
	Huynh-Feldt	.436
	Lower-bound	.220
Error (Visualization*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataVisualizationAttributes * Datasets	Sphericity Assumed	.059
	Greenhouse-Geisser	.059
	Huynh-Feldt	.059
	Lower-bound	.057
Error (DataVisualizationAttributes *Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataVisualizationAttributes * Datasets	Sphericity Assumed	.414
	Greenhouse-Geisser	.273
	Huynh-Feldt	.320
	Lower-bound	.148
Error (Visualization*DataVisualizationAttributes*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Type III Sum of Squares
Visualization	Linear			5.208
	Quadratic			15155.667
	Cubic			367.500
	Order 4			1173.080
Error(Visualization)	Linear			3871.275
	Quadratic			7145.440
	Cubic			5886.100
	Order 4			10435.396
DataVisualizationAttributes		Linear		478.403
		Quadratic		2819.468
Error (DataVisualizationAttributes)		Linear		6063.147
		Quadratic		16432.849
Datasets			Linear	417.824
Error(Datasets)			Linear	6120.209
Visualization * DataVisualizationAttributes	Linear	Linear		574.235
		Quadratic		6.338
	Quadratic	Linear		1.834
		Quadratic		66.667
	Cubic	Linear		194.272
		Quadratic		4.267
	Order 4	Linear		33.353
		Quadratic		144.868
Error (Visualization*DataVisualizationAttributes)	Linear	Linear		2407.990
		Quadratic		4281.004
	Quadratic	Linear		4497.826
		Quadratic		8615.315
	Cubic	Linear		3271.378
		Quadratic		4830.183
	Order 4	Linear		2544.311
		Quadratic		5194.292
Visualization * Datasets	Linear		Linear	761.712
	Quadratic		Linear	511.006
	Cubic		Linear	166.459

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	df
Visualization	Linear			1
	Quadratic			1
	Cubic			1
	Order 4			1
Error(Visualization)	Linear			17
	Quadratic			17
	Cubic			17
	Order 4			17
DataVisualizationAttributes		Linear		1
		Quadratic		1
Error (DataVisualizationAttributes)		Linear		17
		Quadratic		17
Datasets			Linear	1
Error(Datasets)			Linear	17
Visualization * DataVisualizationAttributes	Linear	Linear		1
		Quadratic		1
	Quadratic	Linear		1
		Quadratic		1
	Cubic	Linear		1
		Quadratic		1
	Order 4	Linear		1
		Quadratic		1
Error (Visualization*DataVisualiza tionAttributes)	Linear	Linear		17
		Quadratic		17
	Quadratic	Linear		17
		Quadratic		17
	Cubic	Linear		17
		Quadratic		17
	Order 4	Linear		17
		Quadratic		17
Visualization * Datasets	Linear		Linear	1
	Quadratic		Linear	1
	Cubic		Linear	1

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Mean Square
Visualization	Linear			5.208
	Quadratic			15155.667
	Cubic			367.500
	Order 4			1173.080
Error(Visualization)	Linear			227.722
	Quadratic			420.320
	Cubic			346.241
	Order 4			613.847
DataVisualizationAttributes		Linear		478.403
		Quadratic		2819.468
Error (DataVisualizationAttributes)		Linear		356.656
		Quadratic		966.638
Datasets			Linear	417.824
Error(Datasets)			Linear	360.012
Visualization * DataVisualizationAttributes	Linear	Linear		574.235
		Quadratic		6.338
	Quadratic	Linear		1.834
		Quadratic		66.667
	Cubic	Linear		194.272
		Quadratic		4.267
	Order 4	Linear		33.353
		Quadratic		144.868
Error (Visualization*DataVisualizationAttributes)	Linear	Linear		141.646
		Quadratic		251.824
	Quadratic	Linear		264.578
		Quadratic		506.783
	Cubic	Linear		192.434
		Quadratic		284.128
	Order 4	Linear		149.665
		Quadratic		305.547
Visualization * Datasets	Linear		Linear	761.712
	Quadratic		Linear	511.006
	Cubic		Linear	166.459

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	F	Sig.
Visualization	Linear			.023	.882
	Quadratic			36.057	.000
	Cubic			1.061	.317
	Order 4			1.911	.185
Error(Visualization)	Linear				
	Quadratic				
	Cubic				
	Order 4				
DataVisualizationAttributes		Linear		1.341	.263
		Quadratic		2.917	.106
Error (DataVisualizationAttributes)		Linear			
		Quadratic			
Datasets			Linear	1.161	.296
Error(Datasets)			Linear		
Visualization * DataVisualizationAttributes	Linear	Linear		4.054	.060
		Quadratic		.025	.876
	Quadratic	Linear		.007	.935
		Quadratic		.132	.721
	Cubic	Linear		1.010	.329
		Quadratic		.015	.904
	Order 4	Linear		.223	.643
		Quadratic		.474	.500
Error (Visualization*DataVisualizationAttributes)	Linear	Linear			
		Quadratic			
	Quadratic	Linear			
		Quadratic			
	Cubic	Linear			
		Quadratic			
	Order 4	Linear			
		Quadratic			
Visualization * Datasets	Linear		Linear	3.154	.094
	Quadratic		Linear	2.488	.133
	Cubic		Linear	.676	.422

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Partial Eta Squared
Visualization	Linear			.001
	Quadratic			.680
	Cubic			.059
	Order 4			.101
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataVisualizationAttributes		Linear		.073
		Quadratic		.146
Error (DataVisualizationAttributes)		Linear		
		Quadratic		
Datasets			Linear	.064
Error(Datasets)			Linear	
Visualization * DataVisualizationAttributes	Linear	Linear		.193
		Quadratic		.001
	Quadratic	Linear		.000
		Quadratic		.008
	Cubic	Linear		.056
		Quadratic		.001
	Order 4	Linear		.013
		Quadratic		.027
Error (Visualization*DataVisualizationAttributes)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Datasets	Linear		Linear	.156
	Quadratic		Linear	.128
	Cubic		Linear	.038

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Noncent. Parameter
Visualization	Linear			.023
	Quadratic			36.057
	Cubic			1.061
	Order 4			1.911
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataVisualizationAttributes		Linear		1.341
		Quadratic		2.917
Error (DataVisualizationAttributes)		Linear		
		Quadratic		
Datasets			Linear	1.161
Error(Datasets)			Linear	
Visualization * DataVisualizationAttributes	Linear	Linear		4.054
		Quadratic		.025
	Quadratic	Linear		.007
		Quadratic		.132
	Cubic	Linear		1.010
		Quadratic		.015
	Order 4	Linear		.223
		Quadratic		.474
Error (Visualization*DataVisualizationAttributes)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Datasets	Linear		Linear	3.154
	Quadratic		Linear	2.488
	Cubic		Linear	.676

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Observed Power[a]
Visualization	Linear			.052
	Quadratic			1.000
	Cubic			.163
	Order 4			.257
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataVisualizationAttributes		Linear		.194
		Quadratic		.364
Error (DataVisualizationAttributes)		Linear		
		Quadratic		
Datasets			Linear	.174
Error(Datasets)			Linear	
Visualization * DataVisualizationAttributes	Linear	Linear		.476
		Quadratic		.053
	Quadratic	Linear		.051
		Quadratic		.064
	Cubic	Linear		.158
		Quadratic		.052
	Order 4	Linear		.073
		Quadratic		.100
Error (Visualization*DataVisualizationAttributes)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Datasets	Linear		Linear	.388
	Quadratic		Linear	.319
	Cubic		Linear	.121

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Type III Sum of Squares
	Order 4		Linear	391.323
Error (Visualization*Datasets)	Linear		Linear	4106.105
	Quadratic		Linear	3491.911
	Cubic		Linear	4188.807
	Order 4		Linear	7976.477
DataVisualizationAttributes * Datasets		Linear	Linear	72.003
		Quadratic	Linear	4.934
Error (DataVisualizationAttributes *Datasets)		Linear	Linear	8505.347
		Quadratic	Linear	11207.582
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	374.113
		Quadratic	Linear	208.445
	Quadratic	Linear	Linear	.358
		Quadratic	Linear	330.027
	Cubic	Linear	Linear	716.006
		Quadratic	Linear	20.807
	Order 4	Linear	Linear	370.229
		Quadratic	Linear	90.226
Error (Visualization*DataVisualizationAttributes*Datasets)	Linear	Linear	Linear	3202.513
		Quadratic	Linear	2802.563
	Quadratic	Linear	Linear	4670.017
		Quadratic	Linear	4852.146
	Cubic	Linear	Linear	3421.244
		Quadratic	Linear	3886.976
	Order 4	Linear	Linear	5395.921
		Quadratic	Linear	10837.209

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	df
	Order 4		Linear	1
Error (Visualization*Datasets)	Linear		Linear	17
	Quadratic		Linear	17
	Cubic		Linear	17
	Order 4		Linear	17
DataVisualizationAttributes * Datasets		Linear	Linear	1
		Quadratic	Linear	1
Error (DataVisualizationAttributes *Datasets)		Linear	Linear	17
		Quadratic	Linear	17
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	1
		Quadratic	Linear	1
	Quadratic	Linear	Linear	1
		Quadratic	Linear	1
	Cubic	Linear	Linear	1
		Quadratic	Linear	1
	Order 4	Linear	Linear	1
		Quadratic	Linear	1
Error (Visualization*DataVisualizationAttributes*Datasets)	Linear	Linear	Linear	17
		Quadratic	Linear	17
	Quadratic	Linear	Linear	17
		Quadratic	Linear	17
	Cubic	Linear	Linear	17
		Quadratic	Linear	17
	Order 4	Linear	Linear	17
		Quadratic	Linear	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	Mean Square
	Order 4		Linear	391.323
Error (Visualization*Datasets)	Linear		Linear	241.536
	Quadratic		Linear	205.407
	Cubic		Linear	246.400
	Order 4		Linear	469.205
DataVisualizationAttributes * Datasets		Linear	Linear	72.003
		Quadratic	Linear	4.934
Error (DataVisualizationAttributes *Datasets)		Linear	Linear	500.315
		Quadratic	Linear	659.270
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	374.113
		Quadratic	Linear	208.445
	Quadratic	Linear	Linear	.358
		Quadratic	Linear	330.027
	Cubic	Linear	Linear	716.006
		Quadratic	Linear	20.807
	Order 4	Linear	Linear	370.229
		Quadratic	Linear	90.226
Error (Visualization*DataVisualizationAttributes*Datasets)	Linear	Linear	Linear	188.383
		Quadratic	Linear	164.857
	Quadratic	Linear	Linear	274.707
		Quadratic	Linear	285.420
	Cubic	Linear	Linear	201.250
		Quadratic	Linear	228.646
	Order 4	Linear	Linear	317.407
		Quadratic	Linear	637.483

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataVisualizationAttributes	Datasets	F	Sig.
	Order 4		Linear	.834	.374
Error (Visualization*Datasets)	Linear		Linear		
	Quadratic		Linear		
	Cubic		Linear		
	Order 4		Linear		
DataVisualizationAttributes * Datasets		Linear	Linear	.144	.709
		Quadratic	Linear	.007	.932
Error (DataVisualizationAttributes *Datasets)		Linear	Linear		
		Quadratic	Linear		
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	1.986	.177
		Quadratic	Linear	1.264	.276
	Quadratic	Linear	Linear	.001	.972
		Quadratic	Linear	1.156	.297
	Cubic	Linear	Linear	3.558	.076
		Quadratic	Linear	.091	.767
	Order 4	Linear	Linear	1.166	.295
		Quadratic	Linear	.142	.711
Error (Visualization*DataVisualizationAttributes*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	Visualization	DataVisualizationAttributes	Datasets	Partial Eta Squared
	Order 4		Linear	.047
Error (Visualization*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataVisualizationAttributes * Datasets		Linear	Linear	.008
		Quadratic	Linear	.000
Error (DataVisualizationAttributes *Datasets)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	.105
		Quadratic	Linear	.069
	Quadratic	Linear	Linear	.000
		Quadratic	Linear	.064
	Cubic	Linear	Linear	.173
		Quadratic	Linear	.005
	Order 4	Linear	Linear	.064
		Quadratic	Linear	.008
Error (Visualization*DataVisualizationAttributes*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	Visualization	DataVisualizationAttributes	Datasets	Noncent. Parameter
	Order 4		Linear	.834
Error (Visualization*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataVisualizationAttributes * Datasets		Linear	Linear	.144
		Quadratic	Linear	.007
Error (DataVisualizationAttributes *Datasets)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	1.986
		Quadratic	Linear	1.264
	Quadratic	Linear	Linear	.001
		Quadratic	Linear	1.156
	Cubic	Linear	Linear	3.558
		Quadratic	Linear	.091
	Order 4	Linear	Linear	1.166
		Quadratic	Linear	.142
Error (Visualization*DataVisualizationAttributes*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	Visualization	DataVisualizationAttributes	Datasets	Observed Power[a]
	Order 4		Linear	.139
Error (Visualization*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataVisualizationAttributes * Datasets		Linear	Linear	.065
		Quadratic	Linear	.051
Error (DataVisualizationAttributes *Datasets)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataVisualizationAttributes * Datasets	Linear	Linear	Linear	.265
		Quadratic	Linear	.186
	Quadratic	Linear	Linear	.050
		Quadratic	Linear	.174
	Cubic	Linear	Linear	.429
		Quadratic	Linear	.059
	Order 4	Linear	Linear	.175
		Quadratic	Linear	.065
Error (Visualization*DataVisualizationAttributes*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	371673.869	1	371673.869	217.271	.000	.927
Error	29080.965	17	1710.645			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	217.271	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
26.235	1.780	22.480	29.990

2. Visualization

Estimates

Measure: MEASURE_1

Visualization	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	18.787	1.608	15.395	22.179
2	32.074	3.608	24.463	39.686
3	30.204	2.782	24.334	36.074
4	29.880	2.254	25.123	34.636
5	20.231	1.519	17.027	23.436

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualization	(J) Visualization	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]... Lower Bound
1	2	-13.287*	3.295	.009	-23.906
	3	-11.417*	2.692	.006	-20.092
	4	-11.093*	2.104	.001	-17.872
	5	-1.444	2.214	1.000	-8.578
2	1	13.287*	3.295	.009	2.668
	3	1.870	3.765	1.000	-10.262
	4	2.194	2.393	1.000	-5.518
	5	11.843*	3.030	.011	2.078
3	1	11.417*	2.692	.006	2.741
	2	-1.870	3.765	1.000	-14.003
	4	.324	2.300	1.000	-7.087
	5	9.972*	2.787	.023	.991
4	1	11.093*	2.104	.001	4.313
	2	-2.194	2.393	1.000	-9.907
	3	-.324	2.300	1.000	-7.735
	5	9.648*	2.208	.004	2.535
5	1	1.444	2.214	1.000	-5.689
	2	-11.843*	3.030	.011	-21.608
	3	-9.972*	2.787	.023	-18.954
	4	-9.648*	2.208	.004	-16.762

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualization	(J) Visualization	95% Confidence Interval for [b]... Upper Bound
1	2	-2.668
	3	-2.741
	4	-4.313
	5	5.689
2	1	23.906
	3	14.003
	4	9.907
	5	21.608
3	1	20.092
	2	10.262
	4	7.735
	5	18.954
4	1	17.872
	2	5.518
	3	7.087
	5	16.762
5	1	8.578
	2	-2.078
	3	-.991
	4	-2.535

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	.693	7.900[a]	4.000	14.000	.002	.693
Wilks' lambda	.307	7.900[a]	4.000	14.000	.002	.693
Hotelling's trace	2.257	7.900[a]	4.000	14.000	.002	.693
Roy's largest root	2.257	7.900[a]	4.000	14.000	.002	.693

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	31.602	.979
Wilks' lambda	31.602	.979
Hotelling's trace	31.602	.979
Roy's largest root	31.602	.979

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

a. Exact statistic

b. Computed using alpha = .05

3. DataVisualizationAttributes

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
DataVisualizationAttributes	Mean	Std. Error	Lower Bound	Upper Bound
1	23.467	1.690	19.902	27.031
2	29.467	3.159	22.803	36.131
3	25.772	2.006	21.540	30.005

Pairwise Comparisons

Measure: MEASURE_1

(I) DataVisualizationAttributes	(J) DataVisualizationAttributes	Mean Difference (I-J)	Std. Error	Sig.[a]
1	2	-6.000	3.043	.195
	3	-2.306	1.991	.788
2	1	6.000	3.043	.195
	3	3.694	2.972	.692
3	1	2.306	1.991	.788
	2	-3.694	2.972	.692

Pairwise Comparisons

Measure: MEASURE_1

(I) DataVisualizationAttributes	(J) DataVisualizationAttributes	95% Confidence Interval for Difference[a]	
		Lower Bound	Upper Bound
1	2	-14.078	2.078
	3	-7.591	2.980
2	1	-2.078	14.078
	3	-4.197	11.586
3	1	-2.980	7.591
	2	-11.586	4.197

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	.195	1.937[a]	2.000	16.000	.176	.195
Wilks' lambda	.805	1.937[a]	2.000	16.000	.176	.195
Hotelling's trace	.242	1.937[a]	2.000	16.000	.176	.195
Roy's largest root	.242	1.937[a]	2.000	16.000	.176	.195

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	3.874	.342
Wilks' lambda	3.874	.342
Hotelling's trace	3.874	.342
Roy's largest root	3.874	.342

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

a. Exact statistic

b. Computed using alpha = .05

4. Visualization * DataVisualizationAttributes

Measure: MEASURE_1

Visualization	DataVisualizationAttributes	Mean	Std. Error	95% Confidence Interval Lower Bound	Upper Bound
1	1	18.139	2.035	13.845	22.433
	2	22.722	2.902	16.599	28.846
	3	15.500	1.264	12.833	18.167
2	1	28.583	3.031	22.189	34.978
	2	35.722	6.234	22.569	48.875
	3	31.917	3.793	23.914	39.919
3	1	28.722	3.897	20.501	36.943
	2	31.667	3.870	23.502	39.832
	3	30.222	4.057	21.662	38.783
4	1	26.611	3.141	19.985	33.237
	2	33.667	5.412	22.247	45.086
	3	29.361	3.177	22.658	36.064
5	1	15.278	1.234	12.674	17.882
	2	23.556	2.304	18.694	28.417
	3	21.861	2.806	15.941	27.781