```
GET
  FILE='C:\Users\Bahador\Desktop\Analysis\Cluster\Cluster_Accuracy.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 DataAttributeType 3 Polynomial Dataset
2 Polynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(OVERALL)
  /EMMEANS=TABLES(Visualization) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(DataAttributeType) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Visualization*DataAttributeType)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Visualization DataAttributeType Dataset Visualization*DataAttribut
eType
    Visualization*Dataset DataAttributeType*Dataset Visualization*DataAttribut
eType*Dataset.
```

General Linear Model

Notes

Output Created		05-SEP-2016 19:38:42
Comments		
Input	Data	C:\Users\Bahador\Desktop\Analysis\Cluster\Cluster_Accuracy.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.

| 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=Visualizatio
n 5 Polynomial
DataAttributeType 3
Polynomial Dataset 2
Polynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES
(OVERALL)
  /EMMEANS=TABLES
(Visualization) COMPARE
ADJ(BONFERRONI)
  /EMMEANS=TABLES
(DataAttributeType)
COMPARE ADJ
(BONFERRONI)
  /EMMEANS=TABLES
(Visualization*DataAttribut
eType)
  /PRINT=DESCRIPTIVE
ETASQ OPOWER
HOMOGENEITY
  /CRITERIA=ALPHA(.05)

/WSDESIGN=Visualizatio
n DataAttributeType
Dataset
Visualization*DataAttribute
Type
  Visualization*Dataset
DataAttributeType*Dataset |

Notes

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

[DataSet1] C:\Users\Bahador\Desktop\Analysis\Cluster\Cluster_Accuracy.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	DataAttributeType	Dataset	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	DataAttributeType	Dataset	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	94.4444	23.57023	18
Bar_Nom_Num_Movie	100.0000	.00000	18
Bar_Num_Num_Car	100.0000	.00000	18
Bar_Num_Num_Movie	100.0000	.00000	18
Bar_Ord_Num_Car	100.0000	.00000	18
Bar_Ord_Num_Movie	94.4444	23.57023	18
Line_Nom_Num_Car	100.0000	.00000	18
Line_Nom_Num_Movie	100.0000	.00000	18
Line_Num_Num_Car	22.2222	42.77926	18
Line_Num_Num_Movie	11.1111	32.33808	18
Line_Ord_Num_Car	44.4444	51.13100	18
Line_Ord_Num_Movie	72.2222	46.08886	18
Pie_Nom_Num_Car	88.8889	32.33808	18
Pie_Nom_Num_Movie	100.0000	.00000	18
Pie_Num_Num_Car	100.0000	.00000	18
Pie_Num_Num_Movie	94.4444	23.57023	18
Pie_Ord_Num_Car	100.0000	.00000	18
Pie_Ord_Num_Movie	100.0000	.00000	18
Scatter_Nom_Num_Car	100.0000	.00000	18
Scatter_Nom_Num_Movie	100.0000	.00000	18
Scatter_Num_Num_Car	44.4444	51.13100	18
Scatter_Num_Num_Movie	38.8889	50.16313	18
Scatter_Ord_Num_Car	88.8889	32.33808	18
Scatter_Ord_Num_Movie	83.3333	38.34825	18
Table_Nom_Num_Car	94.4444	23.57023	18
Table_Nom_Num_Movie	100.0000	.00000	18
Table_Num_Num_Car	55.5556	51.13100	18
Table_Num_Num_Movie	61.1111	50.16313	18
Table_Ord_Num_Car	100.0000	.00000	18
Table_Ord_Num_Movie	100.0000	.00000	18

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Visualization	Pillai's Trace	.966	100.011[b]	4.000	14.000
	Wilks' Lambda	.034	100.011[b]	4.000	14.000
	Hotelling's Trace	28.575	100.011[b]	4.000	14.000
	Roy's Largest Root	28.575	100.011[b]	4.000	14.000
DataAttributeType	Pillai's Trace	.951	155.713[b]	2.000	16.000
	Wilks' Lambda	.049	155.713[b]	2.000	16.000
	Hotelling's Trace	19.464	155.713[b]	2.000	16.000
	Roy's Largest Root	19.464	155.713[b]	2.000	16.000
Dataset	Pillai's Trace	.011	.186[b]	1.000	17.000
	Wilks' Lambda	.989	.186[b]	1.000	17.000
	Hotelling's Trace	.011	.186[b]	1.000	17.000
	Roy's Largest Root	.011	.186[b]	1.000	17.000
Visualization * DataAttributeType	Pillai's Trace	.963	32.308[b]	8.000	10.000
	Wilks' Lambda	.037	32.308[b]	8.000	10.000
	Hotelling's Trace	25.847	32.308[b]	8.000	10.000
	Roy's Largest Root	25.847	32.308[b]	8.000	10.000
Visualization * Dataset	Pillai's Trace	.050	.186[b]	4.000	14.000
	Wilks' Lambda	.950	.186[b]	4.000	14.000
	Hotelling's Trace	.053	.186[b]	4.000	14.000
	Roy's Largest Root	.053	.186[b]	4.000	14.000
DataAttributeType * Dataset	Pillai's Trace	.118	1.072[b]	2.000	16.000
	Wilks' Lambda	.882	1.072[b]	2.000	16.000
	Hotelling's Trace	.134	1.072[b]	2.000	16.000
	Roy's Largest Root	.134	1.072[b]	2.000	16.000
Visualization * DataAttributeType * Dataset	Pillai's Trace	.522	1.365[b]	8.000	10.000
	Wilks' Lambda	.478	1.365[b]	8.000	10.000
	Hotelling's Trace	1.092	1.365[b]	8.000	10.000
	Roy's Largest Root	1.092	1.365[b]	8.000	10.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Pillai's Trace	.000	.966	400.044
	Wilks' Lambda	.000	.966	400.044
	Hotelling's Trace	.000	.966	400.044
	Roy's Largest Root	.000	.966	400.044
DataAttributeType	Pillai's Trace	.000	.951	311.427
	Wilks' Lambda	.000	.951	311.427
	Hotelling's Trace	.000	.951	311.427
	Roy's Largest Root	.000	.951	311.427
Dataset	Pillai's Trace	.671	.011	.186
	Wilks' Lambda	.671	.011	.186
	Hotelling's Trace	.671	.011	.186
	Roy's Largest Root	.671	.011	.186
Visualization * DataAttributeType	Pillai's Trace	.000	.963	258.467
	Wilks' Lambda	.000	.963	258.467
	Hotelling's Trace	.000	.963	258.467
	Roy's Largest Root	.000	.963	258.467
Visualization * Dataset	Pillai's Trace	.942	.050	.744
	Wilks' Lambda	.942	.050	.744
	Hotelling's Trace	.942	.050	.744
	Roy's Largest Root	.942	.050	.744
DataAttributeType * Dataset	Pillai's Trace	.366	.118	2.145
	Wilks' Lambda	.366	.118	2.145
	Hotelling's Trace	.366	.118	2.145
	Roy's Largest Root	.366	.118	2.145
Visualization * DataAttributeType * Dataset	Pillai's Trace	.316	.522	10.919
	Wilks' Lambda	.316	.522	10.919
	Hotelling's Trace	.316	.522	10.919
	Roy's Largest Root	.316	.522	10.919

Multivariate Tests[a]

Effect		Observed Power[c]
Visualization	Pillai's Trace	1.000
	Wilks' Lambda	1.000
	Hotelling's Trace	1.000
	Roy's Largest Root	1.000
DataAttributeType	Pillai's Trace	1.000
	Wilks' Lambda	1.000
	Hotelling's Trace	1.000
	Roy's Largest Root	1.000
Dataset	Pillai's Trace	.069
	Wilks' Lambda	.069
	Hotelling's Trace	.069
	Roy's Largest Root	.069
Visualization * DataAttributeType	Pillai's Trace	1.000
	Wilks' Lambda	1.000
	Hotelling's Trace	1.000
	Roy's Largest Root	1.000
Visualization * Dataset	Pillai's Trace	.079
	Wilks' Lambda	.079
	Hotelling's Trace	.079
	Roy's Largest Root	.079
DataAttributeType * Dataset	Pillai's Trace	.205
	Wilks' Lambda	.205
	Hotelling's Trace	.205
	Roy's Largest Root	.205
Visualization * DataAttributeType * Dataset	Pillai's Trace	.346
	Wilks' Lambda	.346
	Hotelling's Trace	.346
	Roy's Largest Root	.346

a. Design: Intercept
   Within Subjects Design: Visualization + DataAttributeType + Dataset + Visualization * DataAttributeType
   + Visualization * Dataset + DataAttributeType * Dataset + Visualization * DataAttributeType * Dataset

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
Visualization	.359	15.802	9	.073	.656
DataAttributeType	.988	.193	2	.908	.988
Dataset	1.000	.000	0	.	1.000
Visualization * DataAttributeType	.002	87.269	35	.000	.398
Visualization * Dataset	.182	26.281	9	.002	.596
DataAttributeType * Dataset	.893	1.808	2	.405	.903
Visualization * DataAttributeType * Dataset	.000	120.473	35	.000	.364

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Visualization	.787	.250
DataAttributeType	1.000	.500
Dataset	1.000	1.000
Visualization * DataAttributeType	.500	.125
Visualization * Dataset	.699	.250
DataAttributeType * Dataset	1.000	.500
Visualization * DataAttributeType * Dataset	.447	.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 + DataAttributeType + Dataset + Visualization * DataAttributeType + Visualization * Dataset + DataAttributeType * Dataset + Visualization * DataAttributeType * Dataset

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
Visualization	Sphericity Assumed	118259.259	4	29564.815	60.785
	Greenhouse-Geisser	118259.259	2.624	45065.814	60.785
	Huynh-Feldt	118259.259	3.147	37583.555	60.785
	Lower-bound	118259.259	1.000	118259.259	60.785
Error(Visualization)	Sphericity Assumed	33074.074	68	486.383	
	Greenhouse-Geisser	33074.074	44.610	741.397	
	Huynh-Feldt	33074.074	53.492	618.303	
	Lower-bound	33074.074	17.000	1945.534	
DataAttributeType	Sphericity Assumed	118037.037	2	59018.519	177.636
	Greenhouse-Geisser	118037.037	1.976	59727.185	177.636
	Huynh-Feldt	118037.037	2.000	59018.519	177.636
	Lower-bound	118037.037	1.000	118037.037	177.636
Error(DataAttributeType)	Sphericity Assumed	11296.296	34	332.244	
	Greenhouse-Geisser	11296.296	33.597	336.233	
	Huynh-Feldt	11296.296	34.000	332.244	
	Lower-bound	11296.296	17.000	664.488	
Dataset	Sphericity Assumed	296.296	1	296.296	.186
	Greenhouse-Geisser	296.296	1.000	296.296	.186
	Huynh-Feldt	296.296	1.000	296.296	.186
	Lower-bound	296.296	1.000	296.296	.186
Error(Dataset)	Sphericity Assumed	27037.037	17	1590.414	
	Greenhouse-Geisser	27037.037	17.000	1590.414	
	Huynh-Feldt	27037.037	17.000	1590.414	
	Lower-bound	27037.037	17.000	1590.414	
Visualization * DataAttributeType	Sphericity Assumed	113629.630	8	14203.704	33.868
	Greenhouse-Geisser	113629.630	3.181	35723.956	33.868

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Sphericity Assumed	.000	.781	243.140
	Greenhouse-Geisser	.000	.781	159.509
	Huynh-Feldt	.000	.781	191.264
	Lower-bound	.000	.781	60.785
Error(Visualization)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeType	Sphericity Assumed	.000	.913	355.272
	Greenhouse-Geisser	.000	.913	351.057
	Huynh-Feldt	.000	.913	355.272
	Lower-bound	.000	.913	177.636
Error(DataAttributeType)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Dataset	Sphericity Assumed	.671	.011	.186
	Greenhouse-Geisser	.671	.011	.186
	Huynh-Feldt	.671	.011	.186
	Lower-bound	.671	.011	.186
Error(Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataAttributeType	Sphericity Assumed	.000	.666	270.940
	Greenhouse-Geisser	.000	.666	107.725

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
Visualization	Sphericity Assumed	1.000
	Greenhouse-Geisser	1.000
	Huynh-Feldt	1.000
	Lower-bound	1.000
Error(Visualization)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeType	Sphericity Assumed	1.000
	Greenhouse-Geisser	1.000
	Huynh-Feldt	1.000
	Lower-bound	1.000
Error(DataAttributeType)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Dataset	Sphericity Assumed	.069
	Greenhouse-Geisser	.069
	Huynh-Feldt	.069
	Lower-bound	.069
Error(Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataAttributeType	Sphericity Assumed	1.000
	Greenhouse-Geisser	1.000

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	113629.630	3.998	28419.281	33.868
	Lower-bound	113629.630	1.000	113629.630	33.868
Error (Visualization*DataAttribute Type)	Sphericity Assumed	57037.037	136	419.390	
	Greenhouse-Geisser	57037.037	54.073	1054.814	
	Huynh-Feldt	57037.037	67.972	839.131	
	Lower-bound	57037.037	17.000	3355.120	
Visualization * Dataset	Sphericity Assumed	1370.370	4	342.593	.360
	Greenhouse-Geisser	1370.370	2.382	575.292	.360
	Huynh-Feldt	1370.370	2.796	490.059	.360
	Lower-bound	1370.370	1.000	1370.370	.360
Error(Visualization*Dataset)	Sphericity Assumed	64629.630	68	950.436	
	Greenhouse-Geisser	64629.630	40.495	1596.001	
	Huynh-Feldt	64629.630	47.538	1359.543	
	Lower-bound	64629.630	17.000	3801.743	
DataAttributeType * Dataset	Sphericity Assumed	1592.593	2	796.296	.819
	Greenhouse-Geisser	1592.593	1.807	881.362	.819
	Huynh-Feldt	1592.593	2.000	796.296	.819
	Lower-bound	1592.593	1.000	1592.593	.819
Error (DataAttributeType*Dataset)	Sphericity Assumed	33074.074	34	972.767	
	Greenhouse-Geisser	33074.074	30.718	1076.685	
	Huynh-Feldt	33074.074	34.000	972.767	
	Lower-bound	33074.074	17.000	1945.534	
Visualization * DataAttributeType * Dataset	Sphericity Assumed	7851.852	8	981.481	.813
	Greenhouse-Geisser	7851.852	2.910	2698.227	.813
	Huynh-Feldt	7851.852	3.576	2195.959	.813
	Lower-bound	7851.852	1.000	7851.852	.813
Error (Visualization*DataAttribute Type*Dataset)	Sphericity Assumed	164148.148	136	1206.972	
	Greenhouse-Geisser	164148.148	49.470	3318.131	
	Huynh-Feldt	164148.148	60.785	2700.469	
	Lower-bound	164148.148	17.000	9655.773	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.000	.666	135.414
	Lower-bound	.000	.666	33.868
Error (Visualization*DataAttribute Type)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * Dataset	Sphericity Assumed	.836	.021	1.442
	Greenhouse-Geisser	.736	.021	.859
	Huynh-Feldt	.768	.021	1.008
	Lower-bound	.556	.021	.360
Error(Visualization*Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeType * Dataset	Sphericity Assumed	.450	.046	1.637
	Greenhouse-Geisser	.439	.046	1.479
	Huynh-Feldt	.450	.046	1.637
	Lower-bound	.378	.046	.819
Error (DataAttributeType*Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataAttributeType * Dataset	Sphericity Assumed	.592	.046	6.505
	Greenhouse-Geisser	.489	.046	2.366
	Huynh-Feldt	.510	.046	2.908
	Lower-bound	.380	.046	.813
Error (Visualization*DataAttribute Type*Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
	Huynh-Feldt	1.000
	Lower-bound	1.000
Error (Visualization*DataAttribute Type)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * Dataset	Sphericity Assumed	.127
	Greenhouse-Geisser	.108
	Huynh-Feldt	.113
	Lower-bound	.088
Error(Visualization*Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeType * Dataset	Sphericity Assumed	.178
	Greenhouse-Geisser	.171
	Huynh-Feldt	.178
	Lower-bound	.137
Error (DataAttributeType*Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataAttributeType * Dataset	Sphericity Assumed	.366
	Greenhouse-Geisser	.210
	Huynh-Feldt	.233
	Lower-bound	.136
Error (Visualization*DataAttribute Type*Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Type III Sum of Squares	df
Visualization	Linear			750.000	1
	Quadratic			11117.725	1
	Cubic			25037.037	1
	Order 4			81354.497	1
Error(Visualization)	Linear			9083.333	17
	Quadratic			4001.323	17
	Cubic			12629.630	17
	Order 4			7359.788	17
DataAttributeType		Linear		8027.778	1
		Quadratic		110009.259	1
Error(DataAttributeType)		Linear		5472.222	17
		Quadratic		5824.074	17
Dataset			Linear	296.296	1
Error(Dataset)			Linear	27037.037	17
Visualization * DataAttributeType	Linear	Linear		2000.000	1
		Quadratic		13500.000	1
	Quadratic	Linear		3214.286	1
		Quadratic		2592.593	1
	Cubic	Linear		5013.889	1
		Quadratic		10226.852	1
	Order 4	Linear		17160.714	1
		Quadratic		59921.296	1
Error (Visualization*DataAttributeType)	Linear	Linear		3000.000	17
		Quadratic		12166.667	17
	Quadratic	Linear		1785.714	17
		Quadratic		4788.360	17
	Cubic	Linear		6236.111	17
		Quadratic		17856.481	17
	Order 4	Linear		5589.286	17
		Quadratic		5614.418	17
Visualization * Dataset	Linear		Linear	9.259	1
	Quadratic		Linear	6.614	1
	Cubic		Linear	1333.333	1
	Order 4		Linear	21.164	1

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Mean Square	F
Visualization	Linear			750.000	1.404
	Quadratic			11117.725	47.235
	Cubic			25037.037	33.701
	Order 4			81354.497	187.917
Error(Visualization)	Linear			534.314	
	Quadratic			235.372	
	Cubic			742.919	
	Order 4			432.929	
DataAttributeType		Linear		8027.778	24.939
		Quadratic		110009.259	321.108
Error(DataAttributeType)		Linear		321.895	
		Quadratic		342.593	
Dataset			Linear	296.296	.186
Error(Dataset)			Linear	1590.414	
Visualization * DataAttributeType	Linear	Linear		2000.000	11.333
		Quadratic		13500.000	18.863
	Quadratic	Linear		3214.286	30.600
		Quadratic		2592.593	9.204
	Cubic	Linear		5013.889	13.668
		Quadratic		10226.852	9.736
	Order 4	Linear		17160.714	52.195
		Quadratic		59921.296	181.437
Error (Visualization*DataAttributeType)	Linear	Linear		176.471	
		Quadratic		715.686	
	Quadratic	Linear		105.042	
		Quadratic		281.668	
	Cubic	Linear		366.830	
		Quadratic		1050.381	
	Order 4	Linear		328.782	
		Quadratic		330.260	
Visualization * Dataset	Linear		Linear	9.259	.020
	Quadratic		Linear	6.614	.013
	Cubic		Linear	1333.333	.648
	Order 4		Linear	21.164	.028

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Sig.	Partial Eta Squared
Visualization	Linear			.252	.076
	Quadratic			.000	.735
	Cubic			.000	.665
	Order 4			.000	.917
Error(Visualization)	Linear				
	Quadratic				
	Cubic				
	Order 4				
DataAttributeType		Linear		.000	.595
		Quadratic		.000	.950
Error(DataAttributeType)		Linear			
		Quadratic			
Dataset			Linear	.671	.011
Error(Dataset)			Linear		
Visualization * DataAttributeType	Linear	Linear		.004	.400
		Quadratic		.000	.526
	Quadratic	Linear		.000	.643
		Quadratic		.007	.351
	Cubic	Linear		.002	.446
		Quadratic		.006	.364
	Order 4	Linear		.000	.754
		Quadratic		.000	.914
Error (Visualization*DataAttributeType)	Linear	Linear			
		Quadratic			
	Quadratic	Linear			
		Quadratic			
	Cubic	Linear			
		Quadratic			
	Order 4	Linear			
		Quadratic			
Visualization * Dataset	Linear		Linear	.889	.001
	Quadratic		Linear	.912	.001
	Cubic		Linear	.432	.037
	Order 4		Linear	.869	.002

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Noncent. Parameter	Observed Power[a]
Visualization	Linear			1.404	.201
	Quadratic			47.235	1.000
	Cubic			33.701	1.000
	Order 4			187.917	1.000
Error(Visualization)	Linear				
	Quadratic				
	Cubic				
	Order 4				
DataAttributeType		Linear		24.939	.997
		Quadratic		321.108	1.000
Error(DataAttributeType)		Linear			
		Quadratic			
Dataset			Linear	.186	.069
Error(Dataset)			Linear		
Visualization * DataAttributeType	Linear	Linear		11.333	.887
		Quadratic		18.863	.983
	Quadratic	Linear		30.600	.999
		Quadratic		9.204	.816
	Cubic	Linear		13.668	.936
		Quadratic		9.736	.836
	Order 4	Linear		52.195	1.000
		Quadratic		181.437	1.000
Error (Visualization*DataAttributeType)	Linear	Linear			
		Quadratic			
	Quadratic	Linear			
		Quadratic			
	Cubic	Linear			
		Quadratic			
	Order 4	Linear			
		Quadratic			
Visualization * Dataset	Linear		Linear	.020	.052
	Quadratic		Linear	.013	.051
	Cubic		Linear	.648	.118
	Order 4		Linear	.028	.053

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Type III Sum of Squares	df
Error(Visualization*Dataset)	Linear		Linear	7824.074	17
	Quadratic		Linear	8921.958	17
	Cubic		Linear	35000.000	17
	Order 4		Linear	12883.598	17
DataAttributeType * Dataset		Linear	Linear	27.778	1
		Quadratic	Linear	1564.815	1
Error (DataAttributeType*Dataset)		Linear	Linear	19472.222	17
		Quadratic	Linear	13601.852	17
Visualization * DataAttributeType * Dataset	Linear	Linear	Linear	222.222	1
		Quadratic	Linear	462.963	1
	Quadratic	Linear	Linear	357.143	1
		Quadratic	Linear	1322.751	1
	Cubic	Linear	Linear	2347.222	1
		Quadratic	Linear	1041.667	1
	Order 4	Linear	Linear	1906.746	1
		Quadratic	Linear	191.138	1
Error (Visualization*DataAttributeType*Dataset)	Linear	Linear	Linear	8777.778	17
		Quadratic	Linear	21203.704	17
	Quadratic	Linear	Linear	4642.857	17
		Quadratic	Linear	30820.106	17
	Cubic	Linear	Linear	9902.778	17
		Quadratic	Linear	39375.000	17
	Order 4	Linear	Linear	19843.254	17
		Quadratic	Linear	29582.672	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Mean Square	F
Error(Visualization*Dataset)	Linear		Linear	460.240	
	Quadratic		Linear	524.821	
	Cubic		Linear	2058.824	
	Order 4		Linear	757.859	
DataAttributeType * Dataset		Linear	Linear	27.778	.024
		Quadratic	Linear	1564.815	1.956
Error (DataAttributeType*Dataset)		Linear	Linear	1145.425	
		Quadratic	Linear	800.109	
Visualization * DataAttributeType * Dataset	Linear	Linear	Linear	222.222	.430
		Quadratic	Linear	462.963	.371
	Quadratic	Linear	Linear	357.143	1.308
		Quadratic	Linear	1322.751	.730
	Cubic	Linear	Linear	2347.222	4.029
		Quadratic	Linear	1041.667	.450
	Order 4	Linear	Linear	1906.746	1.634
		Quadratic	Linear	191.138	.110
Error (Visualization*DataAttributeType*Dataset)	Linear	Linear	Linear	516.340	
		Quadratic	Linear	1247.277	
	Quadratic	Linear	Linear	273.109	
		Quadratic	Linear	1812.947	
	Cubic	Linear	Linear	582.516	
		Quadratic	Linear	2316.176	
	Order 4	Linear	Linear	1167.250	
		Quadratic	Linear	1740.157	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeType	Dataset	Sig.	Partial Eta Squared
Error(Visualization*Dataset)	Linear		Linear		
	Quadratic		Linear		
	Cubic		Linear		
	Order 4		Linear		
DataAttributeType * Dataset		Linear	Linear	.878	.001
		Quadratic	Linear	.180	.103
Error (DataAttributeType*Dataset)		Linear	Linear		
		Quadratic	Linear		
Visualization * DataAttributeType * Dataset	Linear	Linear	Linear	.521	.025
		Quadratic	Linear	.550	.021
	Quadratic	Linear	Linear	.269	.071
		Quadratic	Linear	.405	.041
	Cubic	Linear	Linear	.061	.192
		Quadratic	Linear	.511	.026
	Order 4	Linear	Linear	.218	.088
		Quadratic	Linear	.744	.006
Error (Visualization*DataAttributeType*Dataset)	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	DataAttributeType	Dataset	Noncent. Parameter	Observed Power[a]
Error(Visualization*Dataset)	Linear		Linear		
	Quadratic		Linear		
	Cubic		Linear		
	Order 4		Linear		
DataAttributeType * Dataset		Linear	Linear	.024	.052
		Quadratic	Linear	1.956	.262
Error (DataAttributeType*Dataset)		Linear	Linear		
		Quadratic	Linear		
Visualization * DataAttributeType * Dataset	Linear	Linear	Linear	.430	.095
		Quadratic	Linear	.371	.089
	Quadratic	Linear	Linear	1.308	.191
		Quadratic	Linear	.730	.127
	Cubic	Linear	Linear	4.029	.474
		Quadratic	Linear	.450	.097
	Order 4	Linear	Linear	1.634	.226
		Quadratic	Linear	.110	.061
Error (Visualization*DataAttribute Type*Dataset)	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	3716740.741	1	3716740.741	5298.087	.000	.997
Error	11925.926	17	701.525			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	5298.087	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
82.963	1.140	80.558	85.368

2. Visualization

Estimates

Measure: MEASURE_1

Visualization	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	98.148	1.852	94.241	102.055
2	58.333	2.021	54.069	62.598
3	97.222	1.506	94.044	100.401
4	75.926	3.361	68.835	83.017
5	85.185	1.852	81.278	89.092

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualization	(J) Visualization	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence[b]... Lower Bound
1	2	39.815*	2.387	.000	32.122
	3	.926	2.511	1.000	-7.165
	4	22.222*	3.565	.000	10.734
	5	12.963*	2.541	.001	4.776
2	1	-39.815*	2.387	.000	-47.507
	3	-38.889*	2.334	.000	-46.409
	4	-17.593*	4.147	.005	-30.956
	5	-26.852*	2.741	.000	-35.685
3	1	-.926	2.511	1.000	-9.017
	2	38.889*	2.334	.000	31.368
	4	21.296*	3.764	.000	9.165
	5	12.037*	1.811	.000	6.203
4	1	-22.222*	3.565	.000	-33.710
	2	17.593*	4.147	.005	4.229
	3	-21.296*	3.764	.000	-33.427
	5	-9.259	3.361	.135	-20.090
5	1	-12.963*	2.541	.001	-21.150
	2	26.852*	2.741	.000	18.018
	3	-12.037*	1.811	.000	-17.871
	4	9.259	3.361	.135	-1.572

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualization	(J) Visualization	95% Confidence Interval for [b] Upper Bound
1	2	47.507
	3	9.017
	4	33.710
	5	21.150
2	1	-32.122
	3	-31.368
	4	-4.229
	5	-18.018
3	1	7.165
	2	46.409
	4	33.427
	5	17.871
4	1	-10.734
	2	30.956
	3	-9.165
	5	1.572
5	1	-4.776
	2	35.685
	3	-6.203
	4	20.090

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	.966	100.011[a]	4.000	14.000	.000	.966
Wilks' lambda	.034	100.011[a]	4.000	14.000	.000	.966
Hotelling's trace	28.575	100.011[a]	4.000	14.000	.000	.966
Roy's largest root	28.575	100.011[a]	4.000	14.000	.000	.966

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	400.044	1.000
Wilks' lambda	400.044	1.000
Hotelling's trace	400.044	1.000
Roy's largest root	400.044	1.000

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. DataAttributeType

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
DataAttributeType	Mean	Std. Error	Lower Bound	Upper Bound
1	97.778	1.292	95.051	100.505
2	62.778	1.772	59.039	66.517
3	88.333	1.667	84.817	91.850

Pairwise Comparisons

Measure: MEASURE_1

(I) DataAttributeType	(J) DataAttributeType	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]... Lower Bound
1	2	35.000[*]	2.021	.000	29.634
	3	9.444[*]	1.891	.000	4.423
2	1	-35.000[*]	2.021	.000	-40.366
	3	-25.556[*]	1.847	.000	-30.461
3	1	-9.444[*]	1.891	.000	-14.466
	2	25.556[*]	1.847	.000	20.650

Pairwise Comparisons

Measure: MEASURE_1

(I) DataAttributeType	(J) DataAttributeType	95% Confidence Interval for [b]... Upper Bound
1	2	40.366
	3	14.466
2	1	-29.634
	3	-20.650
3	1	-4.423
	2	30.461

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	.951	155.713[a]	2.000	16.000	.000	.951
Wilks' lambda	.049	155.713[a]	2.000	16.000	.000	.951
Hotelling's trace	19.464	155.713[a]	2.000	16.000	.000	.951
Roy's largest root	19.464	155.713[a]	2.000	16.000	.000	.951

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	311.427	1.000
Wilks' lambda	311.427	1.000
Hotelling's trace	311.427	1.000
Roy's largest root	311.427	1.000

Each F tests the multivariate effect of DataAttributeType. 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 * DataAttributeType

Measure: MEASURE_1

Visualization	DataAttributeType	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	97.222	2.778	91.362	103.083
	2	100.000	.000	100.000	100.000
	3	97.222	2.778	91.362	103.083
2	1	100.000	.000	100.000	100.000
	2	16.667	5.717	4.606	28.728
	3	58.333	4.519	48.798	67.868
3	1	94.444	3.811	86.404	102.485
	2	97.222	2.778	91.362	103.083
	3	100.000	.000	100.000	100.000
4	1	100.000	.000	100.000	100.000
	2	41.667	6.063	28.874	54.459
	3	86.111	5.432	74.651	97.571
5	1	97.222	2.778	91.362	103.083
	2	58.333	4.519	48.798	67.868
	3	100.000	.000	100.000	100.000