

```

GET
FILE='C:\Users\Bahador\Desktop\Analysis\Anomalies_Ranking.sav'.
DATASET NAME DataSet8 WINDOW=FRONT.
DATASET ACTIVATE DataSet6.
DATASET CLOSE DataSet8.
DATASET ACTIVATE DataSet6.
DATASET CLOSE DataSet7.
GET
FILE='C:\Users\Bahador\Desktop\Analysis\Anomalies_Time.sav'.
DATASET NAME DataSet9 WINDOW=FRONT.
GLM Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Ord_Num_Car
Bar_Ord_Num_Movie Line_Nom_Num_Car Line_Nom_Num_Movie Line_Nom_Num_Car Line_Nom_Num_Movie
Line_Ord_Num_Car Line_Ord_Num_Movie Pie_Nom_Num_Car Pie_Nom_Num_Movie Pie_Nom_Num_Car
Pie_Nom_Num_Movie Pie_Ord_Num_Car Pie_Ord_Num_Movie Scatter_Nom_Num_Car Scatter_Nom_Num_Movie
Scatter_Nom_Num_Car Scatter_Nom_Num_Movie Scatter_Ord_Num_Car Scatter_Ord_Num_Movie
Table_Nom_Num_Car Table_Nom_Num_Movie Table_Nom_Num_Car Table_Nom_Num_Movie Table_Ord_Num_Car
Table_Ord_Num_Movie
/WSFACTOR=Visualization 5 Polynomial DataAttributeTypes 3 Polynomial Datasets 2 Polynomial
/METHOD=SSTYPE(3)
/EMMEANS=TABLES(Visualization) COMPARE ADJ(BONFERRONI)
/EMMEANS=TABLES(DataAttributeTypes) COMPARE ADJ(BONFERRONI)
/EMMEANS=TABLES(Visualization*DataAttributeTypes) COMPARE ADJ(BONFERRONI)
/PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=Visualization DataAttributeTypes Datasets Visualization*DataAttributeTypes
Visualization*Datasets DataAttributeTypes*Datasets Visualization*DataAttributeTypes*Datasets.

```

General Linear Model

Notes

Output Created		05-SEP-2016 12:01:35
Comments		
Input	Data	C: \Users\Bahador\Desktop\A nalysis\Anomalies_Time. sav
	Active Dataset	DataSet9
	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=Visualizatio
 n 5 Polynomial
 DataAttributeTypes 3
 Polynomial Datasets 2
 Polynomial
 /METHOD=SSTYPE(3)
 /EMMEANS=TABLES
 (Visualization) COMPARE
 ADJ(BONFERRONI)
 /EMMEANS=TABLES
 (DataAttributeTypes)
 COMPARE ADJ
 (BONFERRONI)
 /EMMEANS=TABLES
 (Visualization*DataAttribut
 eTypes)
 /PRINT=DESCRIPTIVE
 ETASQ OPOWER
 HOMOGENEITY
 /CRITERIA=ALPHA(.05)

/WSDESIGN=Visualizatio
 n DataAttributeTypes
 Datasets
 Visualization*DataAttribute
 Types
 Visualization*Datasets
 DataAttributeTypes*Dat
 ets
 Visualization*DataAttribute
 Types*Datasets

Notes

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

[DataSet9] C:\Users\Bahador\Desktop\Analysis\Anomalies_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	DataAttributeTypes	Datasets	Dependent Variable
1	1	1	Bar_Nom_Nu m_Car
		2	Bar_Nom_Nu m_Movie
	2	1	Bar_Num_Nu m_Car
		2	Bar_Num_Nu m_Movie
	3	1	Bar_Ord_Nu m_Car
		2	Bar_Ord_Nu m_Movie
2	1	1	Line_Nom_Nu m_Car
		2	Line_Nom_Nu m_Movie
	2	1	Line_Num_Nu m_Car
		2	Line_Num_Nu m_Movie
	3	1	Line_Ord_Nu m_Car
		2	Line_Ord_Nu m_Movie
3	1	1	Pie_Nom_Nu m_Car
		2	Pie_Nom_Nu m_Movie

Within-Subjects Factors

Measure: MEASURE_1

Visualization	DataAttributeTypes	Datasets	Dependent Variable
	2	1	Pie_Num_Nu m_Car
		2	Pie_Num_Nu m_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_N um_Car
		2	Table_Ord_N um_Movie

Descriptive Statistics

	Mean	Std. Deviation	N
Bar_Nom_Num_Car	20.5556	14.78561	18
Bar_Nom_Num_Movie	12.5556	12.52396	18
Bar_Num_Num_Car	12.3889	6.23216	18
Bar_Num_Num_Movie	14.5556	9.06332	18
Bar_Ord_Num_Car	10.2778	6.47898	18
Bar_Ord_Num_Movie	16.7778	10.68564	18
Line_Nom_Num_Car	12.5000	8.75315	18
Line_Nom_Num_Movie	17.8333	15.41676	18
Line_Num_Num_Car	24.8889	19.87872	18
Line_Num_Num_Movie	24.9444	15.98702	18
Line_Ord_Num_Car	17.9444	17.18574	18
Line_Ord_Num_Movie	18.2778	8.38630	18
Pie_Nom_Num_Car	15.2222	12.20200	18
Pie_Nom_Num_Movie	13.4444	10.93415	18
Pie_Num_Num_Car	15.1111	13.09193	18
Pie_Num_Num_Movie	10.7778	5.69371	18
Pie_Ord_Num_Car	16.2222	9.25810	18
Pie_Ord_Num_Movie	12.4444	10.63967	18
Scatter_Nom_Num_Car	13.6111	11.56129	18
Scatter_Nom_Num_Movie	15.2222	16.06441	18
Scatter_Num_Num_Car	24.0000	13.14624	18
Scatter_Num_Num_Movie	21.6667	12.56044	18
Scatter_Ord_Num_Car	17.5556	27.92684	18
Scatter_Ord_Num_Movie	10.7222	7.36291	18
Table_Nom_Num_Car	13.4444	8.33294	18
Table_Nom_Num_Movie	9.4444	4.50127	18
Table_Num_Num_Car	10.9444	4.13695	18
Table_Num_Num_Movie	11.7778	12.71662	18
Table_Ord_Num_Car	7.7778	4.74720	18
Table_Ord_Num_Movie	66.6667	48.50713	18

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
Visualization	Pillai's Trace	.608	5.435 ^b	4.000	14.000
	Wilks' Lambda	.392	5.435 ^b	4.000	14.000
	Hotelling's Trace	1.553	5.435 ^b	4.000	14.000
	Roy's Largest Root	1.553	5.435 ^b	4.000	14.000
DataAttributeTypes	Pillai's Trace	.499	7.957 ^b	2.000	16.000
	Wilks' Lambda	.501	7.957 ^b	2.000	16.000
	Hotelling's Trace	.995	7.957 ^b	2.000	16.000
	Roy's Largest Root	.995	7.957 ^b	2.000	16.000
Datasets	Pillai's Trace	.294	7.063 ^b	1.000	17.000
	Wilks' Lambda	.706	7.063 ^b	1.000	17.000
	Hotelling's Trace	.415	7.063 ^b	1.000	17.000
	Roy's Largest Root	.415	7.063 ^b	1.000	17.000
Visualization * DataAttributeTypes	Pillai's Trace	.896	10.735 ^b	8.000	10.000
	Wilks' Lambda	.104	10.735 ^b	8.000	10.000
	Hotelling's Trace	8.588	10.735 ^b	8.000	10.000
	Roy's Largest Root	8.588	10.735 ^b	8.000	10.000
Visualization * Datasets	Pillai's Trace	.582	4.869 ^b	4.000	14.000
	Wilks' Lambda	.418	4.869 ^b	4.000	14.000
	Hotelling's Trace	1.391	4.869 ^b	4.000	14.000
	Roy's Largest Root	1.391	4.869 ^b	4.000	14.000
DataAttributeTypes * Datasets	Pillai's Trace	.401	5.352 ^b	2.000	16.000
	Wilks' Lambda	.599	5.352 ^b	2.000	16.000
	Hotelling's Trace	.669	5.352 ^b	2.000	16.000
	Roy's Largest Root	.669	5.352 ^b	2.000	16.000
Visualization * DataAttributeTypes * Datasets	Pillai's Trace	.757	3.895 ^b	8.000	10.000
	Wilks' Lambda	.243	3.895 ^b	8.000	10.000
	Hotelling's Trace	3.116	3.895 ^b	8.000	10.000
	Roy's Largest Root	3.116	3.895 ^b	8.000	10.000

Multivariate Tests^a

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Pillai's Trace	.007	.608	21.738
	Wilks' Lambda	.007	.608	21.738
	Hotelling's Trace	.007	.608	21.738
	Roy's Largest Root	.007	.608	21.738
DataAttributeTypes	Pillai's Trace	.004	.499	15.913
	Wilks' Lambda	.004	.499	15.913
	Hotelling's Trace	.004	.499	15.913
	Roy's Largest Root	.004	.499	15.913
Datasets	Pillai's Trace	.017	.294	7.063
	Wilks' Lambda	.017	.294	7.063
	Hotelling's Trace	.017	.294	7.063
	Roy's Largest Root	.017	.294	7.063
Visualization * DataAttributeTypes	Pillai's Trace	.001	.896	85.883
	Wilks' Lambda	.001	.896	85.883
	Hotelling's Trace	.001	.896	85.883
	Roy's Largest Root	.001	.896	85.883
Visualization * Datasets	Pillai's Trace	.011	.582	19.475
	Wilks' Lambda	.011	.582	19.475
	Hotelling's Trace	.011	.582	19.475
	Roy's Largest Root	.011	.582	19.475
DataAttributeTypes * Datasets	Pillai's Trace	.017	.401	10.704
	Wilks' Lambda	.017	.401	10.704
	Hotelling's Trace	.017	.401	10.704
	Roy's Largest Root	.017	.401	10.704
Visualization * DataAttributeTypes * Datasets	Pillai's Trace	.024	.757	31.160
	Wilks' Lambda	.024	.757	31.160
	Hotelling's Trace	.024	.757	31.160
	Roy's Largest Root	.024	.757	31.160

Multivariate Tests^a

Effect		Observed Power ^c
Visualization	Pillai's Trace	.902
	Wilks' Lambda	.902
	Hotelling's Trace	.902
	Roy's Largest Root	.902
DataAttributeTypes	Pillai's Trace	.910
	Wilks' Lambda	.910
	Hotelling's Trace	.910
	Roy's Largest Root	.910
Datasets	Pillai's Trace	.707
	Wilks' Lambda	.707
	Hotelling's Trace	.707
	Roy's Largest Root	.707
Visualization * DataAttributeTypes	Pillai's Trace	.999
	Wilks' Lambda	.999
	Hotelling's Trace	.999
	Roy's Largest Root	.999
Visualization * Datasets	Pillai's Trace	.864
	Wilks' Lambda	.864
	Hotelling's Trace	.864
	Roy's Largest Root	.864
DataAttributeTypes * Datasets	Pillai's Trace	.762
	Wilks' Lambda	.762
	Hotelling's Trace	.762
	Roy's Largest Root	.762
Visualization * DataAttributeTypes * Datasets	Pillai's Trace	.825
	Wilks' Lambda	.825
	Hotelling's Trace	.825
	Roy's Largest Root	.825

a. Design: Intercept

Within Subjects Design: Visualization + DataAttributeTypes + Datasets + Visualization *

DataAttributeTypes + Visualization * Datasets + DataAttributeTypes * Datasets + Visualization * ...

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	.216	23.608	9	.005	.606
DataAttributeTypes	.634	7.298	2	.026	.732
Datasets	1.000	.000	0	.	1.000
Visualization * DataAttributeTypes	.005	73.659	35	.000	.401
Visualization * Datasets	.300	18.564	9	.030	.675
DataAttributeTypes * Datasets	.474	11.957	2	.003	.655
Visualization * DataAttributeTypes * Datasets	.020	55.033	35	.022	.551

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Epsilon ^b	
	Huynh-Feldt	Lower-bound
Visualization	.714	.250
DataAttributeTypes	.784	.500
Datasets	1.000	1.000
Visualization * DataAttributeTypes	.506	.125
Visualization * Datasets	.815	.250
DataAttributeTypes * Datasets	.688	.500
Visualization * DataAttributeTypes * Datasets	.768	.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 + DataAttributeTypes + Datasets + Visualization *

DataAttributeTypes + Visualization * Datasets + DataAttributeTypes * Datasets + Visualization * ...

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	3323.678	4	830.919	3.298
	Greenhouse-Geisser	3323.678	2.424	1371.393	3.298
	Huynh-Feldt	3323.678	2.856	1163.916	3.298
	Lower-bound	3323.678	1.000	3323.678	3.298
Error(Visualization)	Sphericity Assumed	17132.189	68	251.944	
	Greenhouse-Geisser	17132.189	41.201	415.821	
	Huynh-Feldt	17132.189	48.545	352.912	
	Lower-bound	17132.189	17.000	1007.776	
DataAttributeTypes	Sphericity Assumed	2329.537	2	1164.769	5.145
	Greenhouse-Geisser	2329.537	1.464	1591.383	5.145
	Huynh-Feldt	2329.537	1.567	1486.375	5.145
	Lower-bound	2329.537	1.000	2329.537	5.145
Error(DataAttributeTypes)	Sphericity Assumed	7697.196	34	226.388	
	Greenhouse-Geisser	7697.196	24.885	309.306	
	Huynh-Feldt	7697.196	26.643	288.897	
	Lower-bound	7697.196	17.000	452.776	
Datasets	Sphericity Assumed	1197.067	1	1197.067	7.063
	Greenhouse-Geisser	1197.067	1.000	1197.067	7.063
	Huynh-Feldt	1197.067	1.000	1197.067	7.063
	Lower-bound	1197.067	1.000	1197.067	7.063
Error(Datasets)	Sphericity Assumed	2881.067	17	169.475	
	Greenhouse-Geisser	2881.067	17.000	169.475	
	Huynh-Feldt	2881.067	17.000	169.475	
	Lower-bound	2881.067	17.000	169.475	
Visualization * DataAttributeTypes	Sphericity Assumed	17499.167	8	2187.396	12.461
	Greenhouse-Geisser	17499.167	3.210	5452.081	12.461

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Sphericity Assumed	.016	.162	13.192
	Greenhouse-Geisser	.038	.162	7.993
	Huynh-Feldt	.030	.162	9.418
	Lower-bound	.087	.162	3.298
Error(Visualization)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeTypes	Sphericity Assumed	.011	.232	10.290
	Greenhouse-Geisser	.021	.232	7.531
	Huynh-Feldt	.019	.232	8.064
	Lower-bound	.037	.232	5.145
Error(DataAttributeTypes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets	Sphericity Assumed	.017	.294	7.063
	Greenhouse-Geisser	.017	.294	7.063
	Huynh-Feldt	.017	.294	7.063
	Lower-bound	.017	.294	7.063
Error(Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataAttributeTypes	Sphericity Assumed	.000	.423	99.686
	Greenhouse-Geisser	.000	.423	39.995

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power ^a
Visualization	Sphericity Assumed	.814
	Greenhouse-Geisser	.649
	Huynh-Feldt	.703
	Lower-bound	.403
Error(Visualization)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeTypes	Sphericity Assumed	.790
	Greenhouse-Geisser	.690
	Huynh-Feldt	.712
	Lower-bound	.571
Error(DataAttributeTypes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets	Sphericity Assumed	.707
	Greenhouse-Geisser	.707
	Huynh-Feldt	.707
	Lower-bound	.707
Error(Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataAttributeTypes	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	17499.167	4.044	4326.797	12.461
	Lower-bound	17499.167	1.000	17499.167	12.461
Error (Visualization*DataAttribute Types)	Sphericity Assumed	23873.767	136	175.542	
	Greenhouse-Geisser	23873.767	54.564	437.539	
	Huynh-Feldt	23873.767	68.754	347.233	
	Lower-bound	23873.767	17.000	1404.339	
Visualization * Datasets	Sphericity Assumed	8682.026	4	2170.506	9.510
	Greenhouse-Geisser	8682.026	2.701	3214.346	9.510
	Huynh-Feldt	8682.026	3.260	2662.983	9.510
	Lower-bound	8682.026	1.000	8682.026	9.510
Error (Visualization*Datasets)	Sphericity Assumed	15519.174	68	228.223	
	Greenhouse-Geisser	15519.174	45.917	337.980	
	Huynh-Feldt	15519.174	55.424	280.006	
	Lower-bound	15519.174	17.000	912.893	
DataAttributeTypes * Datasets	Sphericity Assumed	4377.478	2	2188.739	9.768
	Greenhouse-Geisser	4377.478	1.310	3340.828	9.768
	Huynh-Feldt	4377.478	1.376	3181.849	9.768
	Lower-bound	4377.478	1.000	4377.478	9.768
Error (DataAttributeTypes*Datase ts)	Sphericity Assumed	7618.189	34	224.064	
	Greenhouse-Geisser	7618.189	22.275	342.005	
	Huynh-Feldt	7618.189	23.388	325.730	
	Lower-bound	7618.189	17.000	448.129	
Visualization * DataAttributeTypes * Datasets	Sphericity Assumed	19178.819	8	2397.352	11.057
	Greenhouse-Geisser	19178.819	4.410	4348.498	11.057
	Huynh-Feldt	19178.819	6.147	3120.026	11.057
	Lower-bound	19178.819	1.000	19178.819	11.057
Error (Visualization*DataAttribute Types*Datasets)	Sphericity Assumed	29487.181	136	216.818	
	Greenhouse-Geisser	29487.181	74.978	393.280	
	Huynh-Feldt	29487.181	104.499	282.176	
	Lower-bound	29487.181	17.000	1734.540	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.000	.423	50.396
	Lower-bound	.003	.423	12.461
Error (Visualization*DataAttribute Types)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * Datasets	Sphericity Assumed	.000	.359	38.042
	Greenhouse-Geisser	.000	.359	25.688
	Huynh-Feldt	.000	.359	31.007
	Lower-bound	.007	.359	9.510
Error (Visualization*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeTypes * Datasets	Sphericity Assumed	.000	.365	19.537
	Greenhouse-Geisser	.003	.365	12.799
	Huynh-Feldt	.002	.365	13.439
	Lower-bound	.006	.365	9.768
Error (DataAttributeTypes*Datase ts)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataAttributeTypes * Datasets	Sphericity Assumed	.000	.394	88.456
	Greenhouse-Geisser	.000	.394	48.766
	Huynh-Feldt	.000	.394	67.967
	Lower-bound	.004	.394	11.057
Error (Visualization*DataAttribute Types*Datasets)	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	.914
Error (Visualization*DataAttribute Types)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * Datasets	Sphericity Assumed	.999
	Greenhouse-Geisser	.992
	Huynh-Feldt	.997
	Lower-bound	.828
Error (Visualization*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeTypes * Datasets	Sphericity Assumed	.973
	Greenhouse-Geisser	.905
	Huynh-Feldt	.916
	Lower-bound	.838
Error (DataAttributeTypes*Datase ts)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataAttributeTypes * Datasets	Sphericity Assumed	1.000
	Greenhouse-Geisser	1.000
	Huynh-Feldt	1.000
	Lower-bound	.879
Error (Visualization*DataAttribute Types*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Type III Sum of Squares	df
Visualization	Linear			819.890	1
	Quadratic			176.778	1
	Cubic			1086.008	1
	Order 4			1241.001	1
Error(Visualization)	Linear			5569.194	17
	Quadratic			2902.233	17
	Cubic			5381.408	17
	Order 4			3279.354	17
DataAttributeTypes		Linear		2325.625	1
		Quadratic		3.912	1
Error(DataAttributeTypes)		Linear		3880.425	17
		Quadratic		3816.771	17
Datasets			Linear	1197.067	1
Error(Datasets)			Linear	2881.067	17
Visualization * DataAttributeTypes	Linear	Linear		5324.672	1
		Quadratic		1218.002	1
	Quadratic	Linear		2358.893	1
		Quadratic		3190.224	1
	Cubic	Linear		2236.612	1
		Quadratic		343.204	1
	Order 4	Linear		37.545	1
		Quadratic		2790.015	1
Error (Visualization*DataAttribute Types)	Linear	Linear		2595.228	17
		Quadratic		2940.465	17
	Quadratic	Linear		3905.679	17
		Quadratic		2032.086	17
	Cubic	Linear		5059.863	17
		Quadratic		3121.954	17
	Order 4	Linear		2657.709	17
		Quadratic		1560.784	17
Visualization * Datasets	Linear		Linear	2813.008	1
	Quadratic		Linear	3870.080	1
	Cubic		Linear	1998.112	1
	Order 4		Linear	.826	1

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Mean Square	F
Visualization	Linear			819.890	2.503
	Quadratic			176.778	1.035
	Cubic			1086.008	3.431
	Order 4			1241.001	6.433
Error(Visualization)	Linear			327.600	
	Quadratic			170.720	
	Cubic			316.553	
	Order 4			192.903	
DataAttributeTypes		Linear		2325.625	10.188
		Quadratic		3.912	.017
Error(DataAttributeTypes)		Linear		228.260	
		Quadratic		224.516	
Datasets			Linear	1197.067	7.063
Error(Datasets)			Linear	169.475	
Visualization * DataAttributeTypes	Linear	Linear		5324.672	34.879
		Quadratic		1218.002	7.042
	Quadratic	Linear		2358.893	10.267
		Quadratic		3190.224	26.689
	Cubic	Linear		2236.612	7.515
		Quadratic		343.204	1.869
	Order 4	Linear		37.545	.240
		Quadratic		2790.015	30.389
Error (Visualization*DataAttribute Types)	Linear	Linear		152.660	
		Quadratic		172.969	
	Quadratic	Linear		229.746	
		Quadratic		119.534	
	Cubic	Linear		297.639	
		Quadratic		183.644	
	Order 4	Linear		156.336	
		Quadratic		91.811	
Visualization * Datasets	Linear		Linear	2813.008	7.186
	Quadratic		Linear	3870.080	21.010
	Cubic		Linear	1998.112	10.736
	Order 4		Linear	.826	.005

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Sig.	Partial Eta Squared
Visualization	Linear			.132	.128
	Quadratic			.323	.057
	Cubic			.081	.168
	Order 4			.021	.275
Error(Visualization)	Linear				
	Quadratic				
	Cubic				
	Order 4				
DataAttributeTypes		Linear		.005	.375
		Quadratic		.897	.001
Error(DataAttributeTypes)		Linear			
		Quadratic			
Datasets			Linear	.017	.294
Error(Datasets)			Linear		
Visualization * DataAttributeTypes	Linear	Linear		.000	.672
		Quadratic		.017	.293
	Quadratic	Linear		.005	.377
		Quadratic		.000	.611
	Cubic	Linear		.014	.307
		Quadratic		.189	.099
	Order 4	Linear		.630	.014
		Quadratic		.000	.641
Error (Visualization*DataAttribute Types)	Linear	Linear			
		Quadratic			
	Quadratic	Linear			
		Quadratic			
	Cubic	Linear			
		Quadratic			
	Order 4	Linear			
		Quadratic			
Visualization * Datasets	Linear		Linear	.016	.297
	Quadratic		Linear	.000	.553
	Cubic		Linear	.004	.387
	Order 4		Linear	.942	.000

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Noncent. Parameter
Visualization	Linear			2.503
	Quadratic			1.035
	Cubic			3.431
	Order 4			6.433
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataAttributeTypes		Linear		10.188
		Quadratic		.017
Error(DataAttributeTypes)		Linear		
		Quadratic		
Datasets			Linear	7.063
Error(Datasets)			Linear	
Visualization * DataAttributeTypes	Linear	Linear		34.879
		Quadratic		7.042
	Quadratic	Linear		10.267
		Quadratic		26.689
	Cubic	Linear		7.515
		Quadratic		1.869
	Order 4	Linear		.240
		Quadratic		30.389
Error (Visualization*DataAttribute Types)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Datasets	Linear		Linear	7.186
	Quadratic		Linear	21.010
	Cubic		Linear	10.736
	Order 4		Linear	.005

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Observed Power ^a
Visualization	Linear			.321
	Quadratic			.161
	Cubic			.416
	Order 4			.667
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataAttributeTypes		Linear		.853
		Quadratic		.052
Error(DataAttributeTypes)		Linear		
		Quadratic		
Datasets			Linear	.707
Error(Datasets)			Linear	
Visualization * DataAttributeTypes	Linear	Linear		1.000
		Quadratic		.706
	Quadratic	Linear		.855
		Quadratic		.998
	Cubic	Linear		.734
		Quadratic		.252
	Order 4	Linear		.075
		Quadratic		.999
Error (Visualization*DataAttribute Types)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Datasets	Linear		Linear	.715
	Quadratic		Linear	.991
	Cubic		Linear	.870
	Order 4		Linear	.051

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Type III Sum of Squares	df
Error (Visualization*Datasets)	Linear		Linear	6654.475	17
	Quadratic		Linear	3131.503	17
	Cubic		Linear	3163.905	17
	Order 4		Linear	2569.291	17
DataAttributeTypes * Datasets		Linear	Linear	3453.403	1
		Quadratic	Linear	924.075	1
Error (DataAttributeTypes*Datase ts)		Linear	Linear	5271.847	17
		Quadratic	Linear	2346.342	17
Visualization * DataAttributeTypes * Datasets	Linear	Linear	Linear	3920.000	1
		Quadratic	Linear	1881.600	1
	Quadratic	Linear	Linear	9533.730	1
		Quadratic	Linear	748.021	1
	Cubic	Linear	Linear	1375.035	1
		Quadratic	Linear	762.078	1
	Order 4	Linear	Linear	912.902	1
		Quadratic	Linear	45.452	1
Error (Visualization*DataAttribute Types*Datasets)	Linear	Linear	Linear	5765.000	17
		Quadratic	Linear	3113.767	17
	Quadratic	Linear	Linear	4258.056	17
		Quadratic	Linear	1762.503	17
	Cubic	Linear	Linear	3783.340	17
		Quadratic	Linear	3624.180	17
	Order 4	Linear	Linear	4479.938	17
		Quadratic	Linear	2700.399	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Mean Square	F
Error (Visualization*Datasets)	Linear		Linear	391.440	
	Quadratic		Linear	184.206	
	Cubic		Linear	186.112	
	Order 4		Linear	151.135	
DataAttributeTypes * Datasets		Linear	Linear	3453.403	11.136
		Quadratic	Linear	924.075	6.695
Error (DataAttributeTypes*Datase ts)		Linear	Linear	310.109	
		Quadratic	Linear	138.020	
Visualization * DataAttributeTypes * Datasets	Linear	Linear	Linear	3920.000	11.559
		Quadratic	Linear	1881.600	10.273
	Quadratic	Linear	Linear	9533.730	38.063
		Quadratic	Linear	748.021	7.215
	Cubic	Linear	Linear	1375.035	6.179
		Quadratic	Linear	762.078	3.575
	Order 4	Linear	Linear	912.902	3.464
		Quadratic	Linear	45.452	.286
Error (Visualization*DataAttribute Types*Datasets)	Linear	Linear	Linear	339.118	
		Quadratic	Linear	183.163	
	Quadratic	Linear	Linear	250.474	
		Quadratic	Linear	103.677	
	Cubic	Linear	Linear	222.549	
		Quadratic	Linear	213.187	
	Order 4	Linear	Linear	263.526	
		Quadratic	Linear	158.847	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Datasets	Sig.	Partial Eta Squared
Error (Visualization*Datasets)	Linear		Linear		
	Quadratic		Linear		
	Cubic		Linear		
	Order 4		Linear		
DataAttributeTypes * Datasets		Linear	Linear	.004	.396
		Quadratic	Linear	.019	.283
Error (DataAttributeTypes*Datase ts)		Linear	Linear		
		Quadratic	Linear		
Visualization * DataAttributeTypes * Datasets	Linear	Linear	Linear	.003	.405
		Quadratic	Linear	.005	.377
	Quadratic	Linear	Linear	.000	.691
		Quadratic	Linear	.016	.298
	Cubic	Linear	Linear	.024	.267
		Quadratic	Linear	.076	.174
	Order 4	Linear	Linear	.080	.169
		Quadratic	Linear	.600	.017
Error (Visualization*DataAttribute Types*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	DataAttributeTypes	Datasets	Noncent. Parameter
Error (Visualization*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataAttributeTypes * Datasets		Linear	Linear	11.136
		Quadratic	Linear	6.695
Error (DataAttributeTypes*Dataset s)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataAttributeTypes * Datasets	Linear	Linear	Linear	11.559
		Quadratic	Linear	10.273
	Quadratic	Linear	Linear	38.063
		Quadratic	Linear	7.215
	Cubic	Linear	Linear	6.179
		Quadratic	Linear	3.575
	Order 4	Linear	Linear	3.464
		Quadratic	Linear	.286
Error (Visualization*DataAttribute Types*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	DataAttributeTypes	Datasets	Observed Power ^a
Error (Visualization*Datasets)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataAttributeTypes * Datasets		Linear	Linear	.882
		Quadratic	Linear	.684
Error (DataAttributeTypes*Dataset s)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataAttributeTypes * Datasets	Linear	Linear	Linear	.893
		Quadratic	Linear	.855
	Quadratic	Linear	Linear	1.000
		Quadratic	Linear	.716
	Cubic	Linear	Linear	.649
		Quadratic	Linear	.430
	Order 4	Linear	Linear	.419
		Quadratic	Linear	.080
Error (Visualization*DataAttribute Types*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	155788.119	1	155788.119	214.874	.000	.927
Error	12325.348	17	725.020			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power ^a
Intercept	214.874	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Visualization

Estimates

Measure: MEASURE_1

Visualization	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	14.519	1.471	11.416	17.621
2	19.398	2.127	14.910	23.886
3	13.870	1.361	10.998	16.743
4	17.130	1.455	14.061	20.199
5	20.009	2.321	15.112	24.906

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualization	(J) Visualization	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence b...
					Lower Bound
1	2	-4.880 [*]	1.400	.028	-9.391
	3	.648	1.229	1.000	-3.312
	4	-2.611	1.639	1.000	-7.894
	5	-5.491	2.594	.493	-13.849
2	1	4.880 [*]	1.400	.028	.368
	3	5.528	1.812	.072	-.310
	4	2.269	2.281	1.000	-5.081
	5	-.611	2.804	1.000	-9.646
3	1	-.648	1.229	1.000	-4.609
	2	-5.528	1.812	.072	-11.365
	4	-3.259	1.871	.996	-9.289
	5	-6.139	2.109	.097	-12.935
4	1	2.611	1.639	1.000	-2.672
	2	-2.269	2.281	1.000	-9.618
	3	3.259	1.871	.996	-2.770
	5	-2.880	3.079	1.000	-12.800
5	1	5.491	2.594	.493	-2.867
	2	.611	2.804	1.000	-8.424
	3	6.139	2.109	.097	-.657
	4	2.880	3.079	1.000	-7.041

Pairwise Comparisons

Measure: MEASURE_1

		95% Confidence Interval for ^b ...
(I) Visualization	(J) Visualization	Upper Bound
1	2	-.368
	3	4.609
	4	2.672
	5	2.867
2	1	9.391
	3	11.365
	4	9.618
	5	8.424
3	1	3.312
	2	.310
	4	2.770
	5	.657
4	1	7.894
	2	5.081
	3	9.289
	5	7.041
5	1	13.849
	2	9.646
	3	12.935
	4	12.800

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	.608	5.435 ^a	4.000	14.000	.007	.608
Wilks' lambda	.392	5.435 ^a	4.000	14.000	.007	.608
Hotelling's trace	1.553	5.435 ^a	4.000	14.000	.007	.608
Roy's largest root	1.553	5.435 ^a	4.000	14.000	.007	.608

Multivariate Tests

	Noncent. Parameter	Observed Power ^b
Pillai's trace	21.738	.902
Wilks' lambda	21.738	.902
Hotelling's trace	21.738	.902
Roy's largest root	21.738	.902

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

2. DataAttributeTypes

Estimates

Measure: MEASURE_1

DataAttributeTypes	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	14.383	1.503	11.212	17.555
2	17.106	1.400	14.152	20.059
3	19.467	1.524	16.250	22.683

Pairwise Comparisons

Measure: MEASURE_1

(I) DataAttributeTypes	(J) DataAttributeTypes	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence ^b ...
					Lower Bound
1	2	-2.722	1.089	.069	-5.615
	3	-5.083*	1.593	.016	-9.312
2	1	2.722	1.089	.069	-.170
	3	-2.361	1.955	.731	-7.552
3	1	5.083*	1.593	.016	.855
	2	2.361	1.955	.731	-2.830

Pairwise Comparisons

Measure: MEASURE_1

(I) DataAttributeTypes	(J) DataAttributeTypes	95% Confidence Interval for ^b ...
		Upper Bound
1	2	.170
	3	-.855
2	1	5.615
	3	2.830
3	1	9.312
	2	7.552

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	.499	7.957 ^a	2.000	16.000	.004	.499
Wilks' lambda	.501	7.957 ^a	2.000	16.000	.004	.499
Hotelling's trace	.995	7.957 ^a	2.000	16.000	.004	.499
Roy's largest root	.995	7.957 ^a	2.000	16.000	.004	.499

Multivariate Tests

	Noncent. Parameter	Observed Power ^b
Pillai's trace	15.913	.910
Wilks' lambda	15.913	.910
Hotelling's trace	15.913	.910
Roy's largest root	15.913	.910

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

3. Visualization * DataAttributeTypes

Measure: MEASURE_1

Visualization	DataAttributeTypes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	16.556	2.496	11.290	21.821
	2	13.472	1.571	10.158	16.787
	3	13.528	1.424	10.524	16.532
2	1	15.167	2.151	10.629	19.704
	2	24.917	3.256	18.047	31.786
	3	18.111	2.464	12.912	23.310
3	1	14.333	1.783	10.572	18.095
	2	12.944	1.736	9.281	16.608
	3	14.333	1.691	10.765	17.902
4	1	14.417	2.262	9.644	19.190
	2	22.833	2.324	17.931	27.736
	3	14.139	3.138	7.519	20.759
5	1	11.444	1.427	8.434	14.455
	2	11.361	1.726	7.719	15.003
	3	37.222	5.768	25.054	49.391

DATASET ACTIVATE DataSet6.

DATASET CLOSE DataSet9.

GET

FILE= 'C:\Users\Bahador\Desktop\Analysis\Anomalies_Accuracy.sav'.

DATASET NAME DataSet10 WINDOW=FRONT.

DATASET ACTIVATE DataSet6.

GLM Bar_Nom_Num_CarBar_Nom_Num_MovieBar_Num_Num_CarBar_Num_Num_MovieBar_Ord_Num_Car

Bar_Ord_Num_MovieLine_Nom_Num_CarLine_Nom_Num_MovieLine_Num_Num_CarLine_Num_Num_Movie

Line_Ord_Num_CarLine_Ord_Num_MoviePie_Nom_Num_CarPie_Nom_Num_MoviePie_Num_Num_Car

Pie_Num_Num_MoviePie_Ord_Num_CarPie_Ord_Num_MovieScatter_Nom_Num_CarScatter_Nom_Num_Movie

Scatter_Num_Num_CarScatter_Num_Num_MovieScatter_Ord_Num_CarScatter_Ord_Num_Movie

Table_Nom_Num_CarTable_Nom_Num_MovieTable_Num_Num_CarTable_Num_Num_MovieTable_Ord_Num_Car

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2 Polynomial
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Visualization*Dataset DataAttributeTypes$Dataset Visualization*DataAttribu
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General Linear Model

Notes

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Comments		
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	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	67
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
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    Table_Num_Num_Movie
    Table_Ord_Num_Car
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DataAttributeTypes 3
Polynomial Dataset 2
Polynomial
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Dataset
Visualization*DataAttribute
Types
    Visualization*Dataset
DataAttributeTypes*Datase
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Visualization*DataAttribute
Types*Dataset.

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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

Visualization	DataAttributeTypes	Dataset	Dependent Variable
1	1	1	Bar_Nom_Nu m_Car
		2	Bar_Nom_Nu m_Movie
	2	1	Bar_Num_Nu m_Car
		2	Bar_Num_Nu m_Movie
	3	1	Bar_Ord_Nu m_Car
		2	Bar_Ord_Nu m_Movie
2	1	1	Line_Nom_Nu m_Car
		2	Line_Nom_Nu m_Movie
	2	1	Line_Num_Nu m_Car
		2	Line_Num_Nu m_Movie
	3	1	Line_Ord_Nu m_Car
		2	Line_Ord_Nu m_Movie
3	1	1	Pie_Nom_Nu m_Car
		2	Pie_Nom_Nu m_Movie

Within-Subjects Factors

Measure: MEASURE_1

Visualization	DataAttributeTypes	Dataset	Dependent Variable
	2	1	Pie_Num_Nu m_Car
		2	Pie_Num_Nu m_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_N um_Car
		2	Table_Ord_N um_Movie

Descriptive Statistics

	Mean	Std. Deviation	N
Bar_Nom_Num_Car	2.1667	1.04319	18
Bar_Nom_Num_Movie	3.1667	1.29479	18
Bar_Num_Num_Car	3.1667	1.29479	18
Bar_Num_Num_Movie	2.6667	1.18818	18
Bar_Ord_Num_Car	2.8333	1.24853	18
Bar_Ord_Num_Movie	2.6111	1.19503	18
Line_Nom_Num_Car	3.6111	1.37793	18
Line_Nom_Num_Movie	2.8889	1.36722	18
Line_Num_Num_Car	2.5000	.92355	18
Line_Num_Num_Movie	3.0556	1.30484	18
Line_Ord_Num_Car	2.7778	1.11437	18
Line_Ord_Num_Movie	3.2778	1.12749	18
Pie_Nom_Num_Car	3.8333	1.20049	18
Pie_Nom_Num_Movie	3.8889	1.18266	18
Pie_Num_Num_Car	4.1667	1.09813	18
Pie_Num_Num_Movie	3.9444	1.16175	18
Pie_Ord_Num_Car	4.2222	1.26284	18
Pie_Ord_Num_Movie	3.6111	1.37793	18
Scatter_Nom_Num_Car	2.5556	1.38148	18
Scatter_Nom_Num_Movie	2.1667	1.42457	18
Scatter_Num_Num_Car	2.1111	1.40958	18
Scatter_Num_Num_Movie	2.5000	1.33945	18
Scatter_Ord_Num_Car	2.3889	1.41998	18
Scatter_Ord_Num_Movie	2.6111	1.46082	18
Table_Nom_Num_Car	2.8333	1.46528	18
Table_Nom_Num_Movie	2.8889	1.40958	18
Table_Num_Num_Car	3.0556	1.51356	18
Table_Num_Num_Movie	2.5000	1.33945	18
Table_Ord_Num_Car	2.7778	1.43714	18
Table_Ord_Num_Movie	2.8889	1.74521	18

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
Visualization	Pillai's Trace	.611	5.502 ^b	4.000	14.000
	Wilks' Lambda	.389	5.502 ^b	4.000	14.000
	Hotelling's Trace	1.572	5.502 ^b	4.000	14.000
	Roy's Largest Root	1.572	5.502 ^b	4.000	14.000
DataAttributeTypes	Pillai's Trace	.015	.254 ^b	1.000	17.000
	Wilks' Lambda	.985	.254 ^b	1.000	17.000
	Hotelling's Trace	.015	.254 ^b	1.000	17.000
	Roy's Largest Root	.015	.254 ^b	1.000	17.000
Dataset	Pillai's Trace	.015	.254 ^b	1.000	17.000
	Wilks' Lambda	.985	.254 ^b	1.000	17.000
	Hotelling's Trace	.015	.254 ^b	1.000	17.000
	Roy's Largest Root	.015	.254 ^b	1.000	17.000
Visualization * DataAttributeTypes	Pillai's Trace	.565	1.623 ^b	8.000	10.000
	Wilks' Lambda	.435	1.623 ^b	8.000	10.000
	Hotelling's Trace	1.298	1.623 ^b	8.000	10.000
	Roy's Largest Root	1.298	1.623 ^b	8.000	10.000
Visualization * Dataset	Pillai's Trace	.209	.926 ^b	4.000	14.000
	Wilks' Lambda	.791	.926 ^b	4.000	14.000
	Hotelling's Trace	.265	.926 ^b	4.000	14.000
	Roy's Largest Root	.265	.926 ^b	4.000	14.000
DataAttributeTypes * Dataset	Pillai's Trace	.015	.254 ^b	1.000	17.000
	Wilks' Lambda	.985	.254 ^b	1.000	17.000
	Hotelling's Trace	.015	.254 ^b	1.000	17.000
	Roy's Largest Root	.015	.254 ^b	1.000	17.000
Visualization * DataAttributeTypes * Dataset	Pillai's Trace	.600	1.873 ^b	8.000	10.000
	Wilks' Lambda	.400	1.873 ^b	8.000	10.000
	Hotelling's Trace	1.499	1.873 ^b	8.000	10.000
	Roy's Largest Root	1.499	1.873 ^b	8.000	10.000

Multivariate Tests^a

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Pillai's Trace	.007	.611	22.009
	Wilks' Lambda	.007	.611	22.009
	Hotelling's Trace	.007	.611	22.009
	Roy's Largest Root	.007	.611	22.009
DataAttributeTypes	Pillai's Trace	.621	.015	.254
	Wilks' Lambda	.621	.015	.254
	Hotelling's Trace	.621	.015	.254
	Roy's Largest Root	.621	.015	.254
Dataset	Pillai's Trace	.621	.015	.254
	Wilks' Lambda	.621	.015	.254
	Hotelling's Trace	.621	.015	.254
	Roy's Largest Root	.621	.015	.254
Visualization * DataAttributeTypes	Pillai's Trace	.233	.565	12.982
	Wilks' Lambda	.233	.565	12.982
	Hotelling's Trace	.233	.565	12.982
	Roy's Largest Root	.233	.565	12.982
Visualization * Dataset	Pillai's Trace	.477	.209	3.704
	Wilks' Lambda	.477	.209	3.704
	Hotelling's Trace	.477	.209	3.704
	Roy's Largest Root	.477	.209	3.704
DataAttributeTypes * Dataset	Pillai's Trace	.621	.015	.254
	Wilks' Lambda	.621	.015	.254
	Hotelling's Trace	.621	.015	.254
	Roy's Largest Root	.621	.015	.254
Visualization * DataAttributeTypes * Dataset	Pillai's Trace	.174	.600	14.985
	Wilks' Lambda	.174	.600	14.985
	Hotelling's Trace	.174	.600	14.985
	Roy's Largest Root	.174	.600	14.985

Multivariate Tests^a

Effect		Observed Power ^c
Visualization	Pillai's Trace	.905
	Wilks' Lambda	.905
	Hotelling's Trace	.905
	Roy's Largest Root	.905
DataAttributeTypes	Pillai's Trace	.076
	Wilks' Lambda	.076
	Hotelling's Trace	.076
	Roy's Largest Root	.076
Dataset	Pillai's Trace	.076
	Wilks' Lambda	.076
	Hotelling's Trace	.076
	Roy's Largest Root	.076
Visualization * DataAttributeTypes	Pillai's Trace	.410
	Wilks' Lambda	.410
	Hotelling's Trace	.410
	Roy's Largest Root	.410
Visualization * Dataset	Pillai's Trace	.222
	Wilks' Lambda	.222
	Hotelling's Trace	.222
	Roy's Largest Root	.222
DataAttributeTypes * Dataset	Pillai's Trace	.076
	Wilks' Lambda	.076
	Hotelling's Trace	.076
	Roy's Largest Root	.076
Visualization * DataAttributeTypes * Dataset	Pillai's Trace	.470
	Wilks' Lambda	.470
	Hotelling's Trace	.470
	Roy's Largest Root	.470

a. Design: Intercept

Within Subjects Design: Visualization + DataAttributeTypes + Dataset + Visualization *

DataAttributeTypes + Visualization * Dataset + DataAttributeTypes * Dataset + Visualization * ...

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	.627	7.202	9	.618	.800
DataAttributeTypes	.000	.	2	.	.500
Dataset	1.000	.000	0	.	1.000
Visualization * DataAttributeTypes	.016	58.372	35	.010	.538
Visualization * Dataset	.586	8.228	9	.514	.801
DataAttributeTypes * Dataset	.000	.	2	.	.500
Visualization * DataAttributeTypes * Dataset	.008	68.656	35	.001	.505

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Epsilon ^b	
	Huynh-Feldt	Lower-bound
Visualization	1.000	.250
DataAttributeTypes	.500	.500
Dataset	1.000	1.000
Visualization * DataAttributeTypes	.743	.125
Visualization * Dataset	1.000	.250
DataAttributeTypes * Dataset	.500	.500
Visualization * DataAttributeTypes * Dataset	.682	.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 + DataAttributeTypes + Dataset + Visualization *

DataAttributeTypes + Visualization * Dataset + DataAttributeTypes * Dataset + Visualization * ...

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	145.767	4	36.442	5.942
	Greenhouse-Geisser	145.767	3.199	45.567	5.942
	Huynh-Feldt	145.767	4.000	36.442	5.942
	Lower-bound	145.767	1.000	145.767	5.942
Error(Visualization)	Sphericity Assumed	417.033	68	6.133	
	Greenhouse-Geisser	417.033	54.383	7.668	
	Huynh-Feldt	417.033	68.000	6.133	
	Lower-bound	417.033	17.000	24.531	
DataAttributeTypes	Sphericity Assumed	.133	2	.067	.254
	Greenhouse-Geisser	.133	1.000	.133	.254
	Huynh-Feldt	.133	1.000	.133	.254
	Lower-bound	.133	1.000	.133	.254
Error(DataAttributeTypes)	Sphericity Assumed	8.933	34	.263	
	Greenhouse-Geisser	8.933	17.000	.525	
	Huynh-Feldt	8.933	17.000	.525	
	Lower-bound	8.933	17.000	.525	
Dataset	Sphericity Assumed	.067	1	.067	.254
	Greenhouse-Geisser	.067	1.000	.067	.254
	Huynh-Feldt	.067	1.000	.067	.254
	Lower-bound	.067	1.000	.067	.254
Error(Dataset)	Sphericity Assumed	4.467	17	.263	
	Greenhouse-Geisser	4.467	17.000	.263	
	Huynh-Feldt	4.467	17.000	.263	
	Lower-bound	4.467	17.000	.263	
Visualization * DataAttributeTypes	Sphericity Assumed	6.700	8	.838	.704
	Greenhouse-Geisser	6.700	4.302	1.557	.704

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualization	Sphericity Assumed	.000	.259	23.768
	Greenhouse-Geisser	.001	.259	19.009
	Huynh-Feldt	.000	.259	23.768
	Lower-bound	.026	.259	5.942
Error(Visualization)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeTypes	Sphericity Assumed	.777	.015	.507
	Greenhouse-Geisser	.621	.015	.254
	Huynh-Feldt	.621	.015	.254
	Lower-bound	.621	.015	.254
Error(DataAttributeTypes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Dataset	Sphericity Assumed	.621	.015	.254
	Greenhouse-Geisser	.621	.015	.254
	Huynh-Feldt	.621	.015	.254
	Lower-bound	.621	.015	.254
Error(Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataAttributeTypes	Sphericity Assumed	.688	.040	5.628
	Greenhouse-Geisser	.602	.040	3.027

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power ^a
Visualization	Sphericity Assumed	.978
	Greenhouse-Geisser	.952
	Huynh-Feldt	.978
	Lower-bound	.633
Error(Visualization)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeTypes	Sphericity Assumed	.087
	Greenhouse-Geisser	.076
	Huynh-Feldt	.076
	Lower-bound	.076
Error(DataAttributeTypes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Dataset	Sphericity Assumed	.076
	Greenhouse-Geisser	.076
	Huynh-Feldt	.076
	Lower-bound	.076
Error(Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataAttributeTypes	Sphericity Assumed	.316
	Greenhouse-Geisser	.225

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	6.700	5.941	1.128	.704
	Lower-bound	6.700	1.000	6.700	.704
Error (Visualization*DataAttribute Types)	Sphericity Assumed	161.900	136	1.190	
	Greenhouse-Geisser	161.900	73.133	2.214	
	Huynh-Feldt	161.900	100.992	1.603	
	Lower-bound	161.900	17.000	9.524	
Visualization * Dataset	Sphericity Assumed	2.915	4	.729	.496
	Greenhouse-Geisser	2.915	3.202	.910	.496
	Huynh-Feldt	2.915	4.000	.729	.496
	Lower-bound	2.915	1.000	2.915	.496
Error(Visualization*Dataset)	Sphericity Assumed	99.885	68	1.469	
	Greenhouse-Geisser	99.885	54.439	1.835	
	Huynh-Feldt	99.885	68.000	1.469	
	Lower-bound	99.885	17.000	5.876	
DataAttributeTypes * Dataset	Sphericity Assumed	.133	2	.067	.254
	Greenhouse-Geisser	.133	1.000	.133	.254
	Huynh-Feldt	.133	1.000	.133	.254
	Lower-bound	.133	1.000	.133	.254
Error (DataAttributeTypes*Datase t)	Sphericity Assumed	8.933	34	.263	
	Greenhouse-Geisser	8.933	17.000	.525	
	Huynh-Feldt	8.933	17.000	.525	
	Lower-bound	8.933	17.000	.525	
Visualization * DataAttributeTypes * Dataset	Sphericity Assumed	28.219	8	3.527	2.751
	Greenhouse-Geisser	28.219	4.041	6.983	2.751
	Huynh-Feldt	28.219	5.459	5.170	2.751
	Lower-bound	28.219	1.000	28.219	2.751
Error (Visualization*DataAttribute Types*Dataset)	Sphericity Assumed	174.381	136	1.282	
	Greenhouse-Geisser	174.381	68.697	2.538	
	Huynh-Feldt	174.381	92.795	1.879	
	Lower-bound	174.381	17.000	10.258	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.646	.040	4.179
	Lower-bound	.413	.040	.704
Error (Visualization*DataAttribute Types)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * Dataset	Sphericity Assumed	.739	.028	1.984
	Greenhouse-Geisser	.698	.028	1.589
	Huynh-Feldt	.739	.028	1.984
	Lower-bound	.491	.028	.496
Error(Visualization*Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
DataAttributeTypes * Dataset	Sphericity Assumed	.777	.015	.507
	Greenhouse-Geisser	.621	.015	.254
	Huynh-Feldt	.621	.015	.254
	Lower-bound	.621	.015	.254
Error (DataAttributeTypes*Datase t)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualization * DataAttributeTypes * Dataset	Sphericity Assumed	.008	.139	22.008
	Greenhouse-Geisser	.034	.139	11.117
	Huynh-Feldt	.020	.139	15.016
	Lower-bound	.116	.139	2.751
Error (Visualization*DataAttribute Types*Dataset)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power ^a
	Huynh-Feldt	.267
	Lower-bound	.124
Error (Visualization*DataAttribute Types)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * Dataset	Sphericity Assumed	.161
	Greenhouse-Geisser	.147
	Huynh-Feldt	.161
	Lower-bound	.102
Error(Visualization*Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
DataAttributeTypes * Dataset	Sphericity Assumed	.087
	Greenhouse-Geisser	.076
	Huynh-Feldt	.076
	Lower-bound	.076
Error (DataAttributeTypes*Datase t)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualization * DataAttributeTypes * Dataset	Sphericity Assumed	.927
	Greenhouse-Geisser	.732
	Huynh-Feldt	.830
	Lower-bound	.347
Error (Visualization*DataAttribute Types*Dataset)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Type III Sum of Squares	df
Visualization	Linear			2.904	1
	Quadratic			34.381	1
	Cubic			18.670	1
	Order 4			89.812	1
Error(Visualization)	Linear			78.230	17
	Quadratic			105.000	17
	Cubic			78.696	17
	Order 4			155.107	17
DataAttributeTypes		Linear		.000	1
		Quadratic		.133	1
Error(DataAttributeTypes)		Linear		.000	17
		Quadratic		8.933	17
Dataset			Linear	.067	1
Error(Dataset)			Linear	4.467	17
Visualization * DataAttributeTypes	Linear	Linear		.068	1
		Quadratic		.289	1
	Quadratic	Linear		.001	1
		Quadratic		.360	1
	Cubic	Linear		1.168	1
		Quadratic		1.400	1
	Order 4	Linear		.124	1
		Quadratic		3.289	1
Error (Visualization*DataAttribute Types)	Linear	Linear		25.107	17
		Quadratic		32.902	17
	Quadratic	Linear		15.981	17
		Quadratic		8.491	17
	Cubic	Linear		14.157	17
		Quadratic		6.908	17
	Order 4	Linear		43.894	17
		Quadratic		14.460	17
Visualization * Dataset	Linear		Linear	.626	1
	Quadratic		Linear	.130	1
	Cubic		Linear	.059	1
	Order 4		Linear	2.100	1

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Mean Square	F
Visualization	Linear			2.904	.631
	Quadratic			34.381	5.566
	Cubic			18.670	4.033
	Order 4			89.812	9.843
Error(Visualization)	Linear			4.602	
	Quadratic			6.176	
	Cubic			4.629	
	Order 4			9.124	
DataAttributeTypes		Linear		.000	.
		Quadratic		.133	.254
Error(DataAttributeTypes)		Linear		.000	
		Quadratic		.525	
Dataset			Linear	.067	.254
Error(Dataset)			Linear	.263	
Visualization * DataAttributeTypes	Linear	Linear		.068	.046
		Quadratic		.289	.150
	Quadratic	Linear		.001	.001
		Quadratic		.360	.721
	Cubic	Linear		1.168	1.403
		Quadratic		1.400	3.446
	Order 4	Linear		.124	.048
		Quadratic		3.289	3.867
Error (Visualization*DataAttribute Types)	Linear	Linear		1.477	
		Quadratic		1.935	
	Quadratic	Linear		.940	
		Quadratic		.499	
	Cubic	Linear		.833	
		Quadratic		.406	
	Order 4	Linear		2.582	
		Quadratic		.851	
Visualization * Dataset	Linear		Linear	.626	.383
	Quadratic		Linear	.130	.079
	Cubic		Linear	.059	.036
	Order 4		Linear	2.100	2.184

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Sig.	Partial Eta Squared
Visualization	Linear			.438	.036
	Quadratic			.031	.247
	Cubic			.061	.192
	Order 4			.006	.367
Error(Visualization)	Linear				
	Quadratic				
	Cubic				
	Order 4				
DataAttributeTypes		Linear		.	.
		Quadratic		.621	.015
Error(DataAttributeTypes)		Linear			
		Quadratic			
Dataset			Linear	.621	.015
Error(Dataset)			Linear		
Visualization * DataAttributeTypes	Linear	Linear		.833	.003
		Quadratic		.704	.009
	Quadratic	Linear		.974	.000
		Quadratic		.408	.041
	Cubic	Linear		.253	.076
		Quadratic		.081	.169
	Order 4	Linear		.829	.003
		Quadratic		.066	.185
Error (Visualization*DataAttribute Types)	Linear	Linear			
		Quadratic			
	Quadratic	Linear			
		Quadratic			
	Cubic	Linear			
		Quadratic			
	Order 4	Linear			
		Quadratic			
Visualization * Dataset	Linear		Linear	.544	.022
	Quadratic		Linear	.783	.005
	Cubic		Linear	.851	.002
	Order 4		Linear	.158	.114

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Noncent. Parameter
Visualization	Linear			.631
	Quadratic			5.566
	Cubic			4.033
	Order 4			9.843
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataAttributeTypes		Linear		.
		Quadratic		.254
Error(DataAttributeTypes)		Linear		
		Quadratic		
Dataset			Linear	.254
Error(Dataset)			Linear	
Visualization * DataAttributeTypes	Linear	Linear		.046
		Quadratic		.150
	Quadratic	Linear		.001
		Quadratic		.721
	Cubic	Linear		1.403
		Quadratic		3.446
	Order 4	Linear		.048
		Quadratic		3.867
Error (Visualization*DataAttribute Types)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Dataset	Linear		Linear	.383
	Quadratic		Linear	.079
	Cubic		Linear	.036
	Order 4		Linear	2.184

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Observed Power ^a
Visualization	Linear			.117
	Quadratic			.604
	Cubic			.474
	Order 4			.840
Error(Visualization)	Linear			
	Quadratic			
	Cubic			
	Order 4			
DataAttributeTypes		Linear		.
		Quadratic		.076
Error(DataAttributeTypes)		Linear		
		Quadratic		
Dataset			Linear	.076
Error(Dataset)			Linear	
Visualization * DataAttributeTypes	Linear	Linear		.055
		Quadratic		.065
	Quadratic	Linear		.050
		Quadratic		.126
	Cubic	Linear		.201
		Quadratic		.418
	Order 4	Linear		.055
		Quadratic		.458
Error (Visualization*DataAttribute Types)	Linear	Linear		
		Quadratic		
	Quadratic	Linear		
		Quadratic		
	Cubic	Linear		
		Quadratic		
	Order 4	Linear		
		Quadratic		
Visualization * Dataset	Linear		Linear	.090
	Quadratic		Linear	.058
	Cubic		Linear	.054
	Order 4		Linear	.286

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Type III Sum of Squares	df
Error(Visualization*Dataset)	Linear		Linear	27.774	17
	Quadratic		Linear	28.061	17
	Cubic		Linear	27.707	17
	Order 4		Linear	16.343	17
DataAttributeTypes * Dataset		Linear	Linear	.000	1
		Quadratic	Linear	.133	1
Error (DataAttributeTypes*Dataset)		Linear	Linear	.000	17
		Quadratic	Linear	8.933	17
Visualization * DataAttributeTypes * Dataset	Linear	Linear	Linear	1.701	1
		Quadratic	Linear	.056	1
	Quadratic	Linear	Linear	2.580	1
		Quadratic	Linear	7.945	1
	Cubic	Linear	Linear	2.813	1
		Quadratic	Linear	.245	1
	Order 4	Linear	Linear	10.045	1
		Quadratic	Linear	2.834	1
Error (Visualization*DataAttributeTypes*Dataset)	Linear	Linear	Linear	14.574	17
		Quadratic	Linear	29.769	17
	Quadratic	Linear	Linear	30.616	17
		Quadratic	Linear	31.883	17
	Cubic	Linear	Linear	6.913	17
		Quadratic	Linear	9.263	17
	Order 4	Linear	Linear	38.259	17
		Quadratic	Linear	13.105	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Mean Square	F
Error(Visualization*Dataset)	Linear		Linear	1.634	
	Quadratic		Linear	1.651	
	Cubic		Linear	1.630	
	Order 4		Linear	.961	
DataAttributeTypes * Dataset		Linear	Linear	.000	.
		Quadratic	Linear	.133	.254
Error (DataAttributeTypes*Dataset)		Linear	Linear	.000	
		Quadratic	Linear	.525	
Visualization * DataAttributeTypes * Dataset	Linear	Linear	Linear	1.701	1.985
		Quadratic	Linear	.056	.032
	Quadratic	Linear	Linear	2.580	1.433
		Quadratic	Linear	7.945	4.236
	Cubic	Linear	Linear	2.813	6.917
		Quadratic	Linear	.245	.449
	Order 4	Linear	Linear	10.045	4.463
		Quadratic	Linear	2.834	3.676
Error (Visualization*DataAttributeTypes*Dataset)	Linear	Linear	Linear	.857	
		Quadratic	Linear	1.751	
	Quadratic	Linear	Linear	1.801	
		Quadratic	Linear	1.875	
	Cubic	Linear	Linear	.407	
		Quadratic	Linear	.545	
	Order 4	Linear	Linear	2.251	
		Quadratic	Linear	.771	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualization	DataAttributeTypes	Dataset	Sig.	Partial Eta Squared
Error(Visualization*Dataset)	Linear		Linear		
	Quadratic		Linear		
	Cubic		Linear		
	Order 4		Linear		
DataAttributeTypes * Dataset		Linear	Linear	.	.
		Quadratic	Linear	.621	.015
Error (DataAttributeTypes*Dataset)		Linear	Linear		
		Quadratic	Linear		
Visualization * DataAttributeTypes * Dataset	Linear	Linear	Linear	.177	.105
		Quadratic	Linear	.860	.002
	Quadratic	Linear	Linear	.248	.078
		Quadratic	Linear	.055	.199
	Cubic	Linear	Linear	.018	.289
		Quadratic	Linear	.512	.026
	Order 4	Linear	Linear	.050	.208
		Quadratic	Linear	.072	.178
Error (Visualization*DataAttributeTypes*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	DataAttributeTypes	Dataset	Noncent. Parameter
Error(Visualization*Dataset)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataAttributeTypes * Dataset		Linear	Linear	.
		Quadratic	Linear	.254
Error (DataAttributeTypes*Dataset)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataAttributeTypes * Dataset	Linear	Linear	Linear	1.985
		Quadratic	Linear	.032
	Quadratic	Linear	Linear	1.433
		Quadratic	Linear	4.236
	Cubic	Linear	Linear	6.917
		Quadratic	Linear	.449
	Order 4	Linear	Linear	4.463
		Quadratic	Linear	3.676
Error (Visualization*DataAttribute Types*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	DataAttributeTypes	Dataset	Observed Power ^a
Error(Visualization*Dataset)	Linear		Linear	
	Quadratic		Linear	
	Cubic		Linear	
	Order 4		Linear	
DataAttributeTypes * Dataset		Linear	Linear	.
		Quadratic	Linear	.076
Error (DataAttributeTypes*Dataset)		Linear	Linear	
		Quadratic	Linear	
Visualization * DataAttributeTypes * Dataset	Linear	Linear	Linear	.265
		Quadratic	Linear	.053
	Quadratic	Linear	Linear	.204
		Quadratic	Linear	.493
	Cubic	Linear	Linear	.698
		Quadratic	Linear	.097
	Order 4	Linear	Linear	.513
		Quadratic	Linear	.440
Error (Visualization*DataAttributeTypes*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	4824.067	1	4824.067	18360.254	.000	.999
Error	4.467	17	.263			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power ^a
Intercept	18360.254	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Visualization

Measure: MEASURE_1

Visualization	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	2.769	.199	2.350	3.187
2	3.019	.188	2.623	3.414
3	3.944	.205	3.511	4.377
4	2.389	.264	1.832	2.946
5	2.824	.208	2.386	3.262

2. DataAttributeTypes

Measure: MEASURE_1

DataAttributeTypes	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	3.000	.000	3.000	3.000
2	2.967	.066	2.827	3.106
3	3.000	.000	3.000	3.000

3. Visualization * DataAttributeTypes

Measure: MEASURE_1

Visualization	DataAttributeTypes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	2.667	.225	2.192	3.142
	2	2.917	.253	2.382	3.451
	3	2.722	.233	2.231	3.214
2	1	3.250	.256	2.709	3.791
	2	2.778	.207	2.341	3.214
	3	3.028	.200	2.606	3.450
3	1	3.861	.209	3.420	4.303
	2	4.056	.217	3.597	4.514
	3	3.917	.272	3.343	4.490
4	1	2.361	.285	1.759	2.963
	2	2.306	.303	1.667	2.945
	3	2.500	.308	1.850	3.150
5	1	2.861	.291	2.247	3.475
	2	2.778	.163	2.434	3.121
	3	2.833	.326	2.146	3.521