```
 GET
  FILE='C:\Users\Bahador\Desktop\SPSS-Analysis\Anomalies\Anomalies_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=Visualizations 5 Polynomial Datasets 2 Polynomial Attributes 3 Pol
ynomial
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Visualizations) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Datasets) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Attributes) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Visualizations*Datasets)
  /EMMEANS=TABLES(Visualizations*Attributes)
  /EMMEANS=TABLES(Datasets*Attributes)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Visualizations Datasets Attributes Visualizations*Datasets Visuali
zations*Attributes
    Datasets*Attributes Visualizations*Datasets*Attributes.
```

General Linear Model

Notes

Output Created		24-MAR-2017 13:06:28
Comments		
Input	Data	C:\Users\Bahador\Desktop\SPSS-Analysis\Anomalies\Anomalies_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=Visualizations 5 Polynomial Datasets 2 Polynomial Attributes 3 Polynomial /METHOD=SSTYPE(3) /EMMEANS=TABLES (Visualizations) COMPARE ADJ (BONFERRONI) /EMMEANS=TABLES (Datasets) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (Attributes) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES (Visualizations*Datasets) /EMMEANS=TABLES (Visualizations*Attributes) /EMMEANS=TABLES (Datasets*Attributes) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=Visualizations Datasets Attributes Visualizations*Datasets Visualizations*Attributes

Notes

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

[DataSet1] C:\Users\Bahador\Desktop\SPSS-Analysis\Anomalies\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

Visualizations	Datasets	Attributes	Dependent Variable
1	1	1	Bar_Nom_Num_Car
		2	Bar_Nom_Num_Movie
		3	Bar_Num_Num_Car
	2	1	Bar_Num_Num_Movie
		2	Bar_Ord_Num_Car
		3	Bar_Ord_Num_Movie
2	1	1	Line_Nom_Num_Car
		2	Line_Nom_Num_Movie
		3	Line_Num_Num_Car
	2	1	Line_Num_Num_Movie
		2	Line_Ord_Num_Car
		3	Line_Ord_Num_Movie

Within-Subjects Factors

Measure: MEASURE_1

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

Descriptive Statistics

	Mean	Std. Deviation	N
Bar_Nom_Num_Car	1.1726	.39925	18
Bar_Nom_Num_Movie	.9567	.34349	18
Bar_Num_Num_Car	1.0318	.25959	18
Bar_Num_Num_Movie	1.0838	.28585	18
Bar_Ord_Num_Car	.9164	.33174	18
Bar_Ord_Num_Movie	1.1263	.31806	18
Line_Nom_Num_Car	.9896	.32708	18
Line_Nom_Num_Movie	1.0857	.41663	18
Line_Num_Num_Car	1.2294	.43776	18
Line_Num_Num_Movie	1.2550	.44731	18
Line_Ord_Num_Car	1.0903	.40232	18
Line_Ord_Num_Movie	1.1952	.29032	18
Pie_Nom_Num_Car	1.0571	.35835	18
Pie_Nom_Num_Movie	.9961	.35428	18
Pie_Num_Num_Car	1.0525	.35099	18
Pie_Num_Num_Movie	.9566	.28934	18
Pie_Ord_Num_Car	1.1238	.34070	18
Pie_Ord_Num_Movie	.9938	.29609	18
Scatter_Nom_Num_Car	.9790	.39508	18
Scatter_Nom_Num_Movie	1.0205	.40372	18
Scatter_Num_Num_Car	1.3215	.23508	18
Scatter_Num_Num_Movie	1.2709	.24368	18
Scatter_Ord_Num_Car	1.0387	.37539	18
Scatter_Ord_Num_Movie	.9372	.31864	18
Table_Nom_Num_Car	1.0493	.28553	18
Table_Nom_Num_Movie	.8992	.31387	18
Table_Num_Num_Car	1.0082	.17862	18
Table_Num_Num_Movie	.9210	.37097	18
Table_Ord_Num_Car	.8250	.24384	18
Table_Ord_Num_Movie	1.0774	.18636	18

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Visualizations	Pillai's Trace	.685	7.602[b]	4.000	14.000
	Wilks' Lambda	.315	7.602[b]	4.000	14.000
	Hotelling's Trace	2.172	7.602[b]	4.000	14.000
	Roy's Largest Root	2.172	7.602[b]	4.000	14.000
Datasets	Pillai's Trace	.001	.013[b]	1.000	17.000
	Wilks' Lambda	.999	.013[b]	1.000	17.000
	Hotelling's Trace	.001	.013[b]	1.000	17.000
	Roy's Largest Root	.001	.013[b]	1.000	17.000
Attributes	Pillai's Trace	.575	10.811[b]	2.000	16.000
	Wilks' Lambda	.425	10.811[b]	2.000	16.000
	Hotelling's Trace	1.351	10.811[b]	2.000	16.000
	Roy's Largest Root	1.351	10.811[b]	2.000	16.000
Visualizations * Datasets	Pillai's Trace	.218	.977[b]	4.000	14.000
	Wilks' Lambda	.782	.977[b]	4.000	14.000
	Hotelling's Trace	.279	.977[b]	4.000	14.000
	Roy's Largest Root	.279	.977[b]	4.000	14.000
Visualizations * Attributes	Pillai's Trace	.531	1.416[b]	8.000	10.000
	Wilks' Lambda	.469	1.416[b]	8.000	10.000
	Hotelling's Trace	1.133	1.416[b]	8.000	10.000
	Roy's Largest Root	1.133	1.416[b]	8.000	10.000
Datasets * Attributes	Pillai's Trace	.174	1.691[b]	2.000	16.000
	Wilks' Lambda	.826	1.691[b]	2.000	16.000
	Hotelling's Trace	.211	1.691[b]	2.000	16.000
	Roy's Largest Root	.211	1.691[b]	2.000	16.000
Visualizations * Datasets * Attributes	Pillai's Trace	.843	6.737[b]	8.000	10.000
	Wilks' Lambda	.157	6.737[b]	8.000	10.000
	Hotelling's Trace	5.390	6.737[b]	8.000	10.000
	Roy's Largest Root	5.390	6.737[b]	8.000	10.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualizations	Pillai's Trace	.002	.685	30.408
	Wilks' Lambda	.002	.685	30.408
	Hotelling's Trace	.002	.685	30.408
	Roy's Largest Root	.002	.685	30.408
Datasets	Pillai's Trace	.912	.001	.013
	Wilks' Lambda	.912	.001	.013
	Hotelling's Trace	.912	.001	.013
	Roy's Largest Root	.912	.001	.013
Attributes	Pillai's Trace	.001	.575	21.623
	Wilks' Lambda	.001	.575	21.623
	Hotelling's Trace	.001	.575	21.623
	Roy's Largest Root	.001	.575	21.623
Visualizations * Datasets	Pillai's Trace	.451	.218	3.906
	Wilks' Lambda	.451	.218	3.906
	Hotelling's Trace	.451	.218	3.906
	Roy's Largest Root	.451	.218	3.906
Visualizations * Attributes	Pillai's Trace	.297	.531	11.329
	Wilks' Lambda	.297	.531	11.329
	Hotelling's Trace	.297	.531	11.329
	Roy's Largest Root	.297	.531	11.329
Datasets * Attributes	Pillai's Trace	.216	.174	3.382
	Wilks' Lambda	.216	.174	3.382
	Hotelling's Trace	.216	.174	3.382
	Roy's Largest Root	.216	.174	3.382
Visualizations * Datasets * Attributes	Pillai's Trace	.003	.843	53.896
	Wilks' Lambda	.003	.843	53.896
	Hotelling's Trace	.003	.843	53.896
	Roy's Largest Root	.003	.843	53.896

Multivariate Tests[a]

Effect		Observed Power[c]
Visualizations	Pillai's Trace	.975
	Wilks' Lambda	.975
	Hotelling's Trace	.975
	Roy's Largest Root	.975
Datasets	Pillai's Trace	.051
	Wilks' Lambda	.051
	Hotelling's Trace	.051
	Roy's Largest Root	.051
Attributes	Pillai's Trace	.973
	Wilks' Lambda	.973
	Hotelling's Trace	.973
	Roy's Largest Root	.973
Visualizations * Datasets	Pillai's Trace	.233
	Wilks' Lambda	.233
	Hotelling's Trace	.233
	Roy's Largest Root	.233
Visualizations * Attributes	Pillai's Trace	.359
	Wilks' Lambda	.359
	Hotelling's Trace	.359
	Roy's Largest Root	.359
Datasets * Attributes	Pillai's Trace	.303
	Wilks' Lambda	.303
	Hotelling's Trace	.303
	Roy's Largest Root	.303
Visualizations * Datasets * Attributes	Pillai's Trace	.977
	Wilks' Lambda	.977
	Hotelling's Trace	.977
	Roy's Largest Root	.977

a. Design: Intercept
Within Subjects Design: Visualizations + Datasets + Attributes + Visualizations * Datasets + Visualizations * Attributes + Datasets * Attributes + Visualizations * Datasets * Attributes

b. Exact statistic

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
Visualizations	.497	10.790	9	.293	.802
Datasets	1.000	.000	0	.	1.000
Attributes	.962	.624	2	.732	.963
Visualizations * Datasets	.645	6.762	9	.664	.830
Visualizations * Attributes	.094	33.361	35	.576	.625
Datasets * Attributes	.956	.725	2	.696	.958
Visualizations * Datasets * Attributes	.021	54.305	35	.025	.560

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Visualizations	1.000	.250
Datasets	1.000	1.000
Attributes	1.000	.500
Visualizations * Datasets	1.000	.250
Visualizations * Attributes	.916	.125
Datasets * Attributes	1.000	.500
Visualizations * Datasets * Attributes	.785	.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: Visualizations + Datasets + Attributes + Visualizations * Datasets + Visualizations * Attributes + Datasets * Attributes + Visualizations * Datasets * Attributes

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
Visualizations	Sphericity Assumed	1.946	4	.486	6.324
	Greenhouse-Geisser	1.946	3.207	.607	6.324
	Huynh-Feldt	1.946	4.000	.486	6.324
	Lower-bound	1.946	1.000	1.946	6.324
Error(Visualizations)	Sphericity Assumed	5.231	68	.077	
	Greenhouse-Geisser	5.231	54.518	.096	
	Huynh-Feldt	5.231	68.000	.077	
	Lower-bound	5.231	17.000	.308	
Datasets	Sphericity Assumed	.001	1	.001	.013
	Greenhouse-Geisser	.001	1.000	.001	.013
	Huynh-Feldt	.001	1.000	.001	.013
	Lower-bound	.001	1.000	.001	.013
Error(Datasets)	Sphericity Assumed	1.157	17	.068	
	Greenhouse-Geisser	1.157	17.000	.068	
	Huynh-Feldt	1.157	17.000	.068	
	Lower-bound	1.157	17.000	.068	
Attributes	Sphericity Assumed	1.027	2	.513	9.478
	Greenhouse-Geisser	1.027	1.926	.533	9.478
	Huynh-Feldt	1.027	2.000	.513	9.478
	Lower-bound	1.027	1.000	1.027	9.478
Error(Attributes)	Sphericity Assumed	1.842	34	.054	
	Greenhouse-Geisser	1.842	32.748	.056	
	Huynh-Feldt	1.842	34.000	.054	
	Lower-bound	1.842	17.000	.108	
Visualizations * Datasets	Sphericity Assumed	.242	4	.061	1.414
	Greenhouse-Geisser	.242	3.320	.073	1.414
	Huynh-Feldt	.242	4.000	.061	1.414
	Lower-bound	.242	1.000	.242	1.414
Error (Visualizations*Datasets)	Sphericity Assumed	2.912	68	.043	
	Greenhouse-Geisser	2.912	56.447	.052	
	Huynh-Feldt	2.912	68.000	.043	
	Lower-bound	2.912	17.000	.171	
Visualizations * Attributes	Sphericity Assumed	.879	8	.110	1.552
	Greenhouse-Geisser	.879	4.996	.176	1.552

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualizations	Sphericity Assumed	.000	.271	25.294
	Greenhouse-Geisser	.001	.271	20.280
	Huynh-Feldt	.000	.271	25.294
	Lower-bound	.022	.271	6.324
Error(Visualizations)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets	Sphericity Assumed	.912	.001	.013
	Greenhouse-Geisser	.912	.001	.013
	Huynh-Feldt	.912	.001	.013
	Lower-bound	.912	.001	.013
Error(Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Attributes	Sphericity Assumed	.001	.358	18.956
	Greenhouse-Geisser	.001	.358	18.258
	Huynh-Feldt	.001	.358	18.956
	Lower-bound	.007	.358	9.478
Error(Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Datasets	Sphericity Assumed	.239	.077	5.657
	Greenhouse-Geisser	.246	.077	4.696
	Huynh-Feldt	.239	.077	5.657
	Lower-bound	.251	.077	1.414
Error (Visualizations*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Attributes	Sphericity Assumed	.145	.084	12.414
	Greenhouse-Geisser	.183	.084	7.753

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
Visualizations	Sphericity Assumed	.985
	Greenhouse-Geisser	.964
	Huynh-Feldt	.985
	Lower-bound	.659
Error(Visualizations)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets	Sphericity Assumed	.051
	Greenhouse-Geisser	.051
	Huynh-Feldt	.051
	Lower-bound	.051
Error(Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Attributes	Sphericity Assumed	.969
	Greenhouse-Geisser	.965
	Huynh-Feldt	.969
	Lower-bound	.827
Error(Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Datasets	Sphericity Assumed	.417
	Greenhouse-Geisser	.374
	Huynh-Feldt	.417
	Lower-bound	.202
Error (Visualizations*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Attributes	Sphericity Assumed	.673
	Greenhouse-Geisser	.518

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	.879	7.325	.120	1.552
	Lower-bound	.879	1.000	.879	1.552
Error (Visualizations*Attributes)	Sphericity Assumed	9.625	136	.071	
	Greenhouse-Geisser	9.625	84.935	.113	
	Huynh-Feldt	9.625	124.529	.077	
	Lower-bound	9.625	17.000	.566	
Datasets * Attributes	Sphericity Assumed	.282	2	.141	2.166
	Greenhouse-Geisser	.282	1.915	.147	2.166
	Huynh-Feldt	.282	2.000	.141	2.166
	Lower-bound	.282	1.000	.282	2.166
Error(Datasets*Attributes)	Sphericity Assumed	2.212	34	.065	
	Greenhouse-Geisser	2.212	32.557	.068	
	Huynh-Feldt	2.212	34.000	.065	
	Lower-bound	2.212	17.000	.130	
Visualizations * Datasets * Attributes	Sphericity Assumed	2.894	8	.362	4.166
	Greenhouse-Geisser	2.894	4.478	.646	4.166
	Huynh-Feldt	2.894	6.278	.461	4.166
	Lower-bound	2.894	1.000	2.894	4.166
Error (Visualizations*Datasets*Attributes)	Sphericity Assumed	11.809	136	.087	
	Greenhouse-Geisser	11.809	76.134	.155	
	Huynh-Feldt	11.809	106.728	.111	
	Lower-bound	11.809	17.000	.695	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.153	.084	11.367
	Lower-bound	.230	.084	1.552
Error (Visualizations*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets * Attributes	Sphericity Assumed	.130	.113	4.332
	Greenhouse-Geisser	.133	.113	4.148
	Huynh-Feldt	.130	.113	4.332
	Lower-bound	.159	.113	2.166
Error(Datasets*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Datasets * Attributes	Sphericity Assumed	.000	.197	33.326
	Greenhouse-Geisser	.003	.197	18.656
	Huynh-Feldt	.001	.197	26.153
	Lower-bound	.057	.197	4.166
Error (Visualizations*Datasets*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
	Huynh-Feldt	.643
	Lower-bound	.217
Error (Visualizations*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets * Attributes	Sphericity Assumed	.412
	Greenhouse-Geisser	.402
	Huynh-Feldt	.412
	Lower-bound	.284
Error(Datasets*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Datasets * Attributes	Sphericity Assumed	.992
	Greenhouse-Geisser	.927
	Huynh-Feldt	.976
	Lower-bound	.486
Error (Visualizations*Datasets*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

a. Computed using alpha = .05

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Type III Sum of Squares	df
Visualizations	Linear			.501	1
	Quadratic			.575	1
	Cubic			.001	1
	Order 4			.870	1
Error(Visualizations)	Linear			1.470	17
	Quadratic			.428	17
	Cubic			1.710	17
	Order 4			1.623	17
Datasets		Linear		.001	1
Error(Datasets)		Linear		1.157	17
Attributes			Linear	.051	1
			Quadratic	.976	1
Error(Attributes)			Linear	1.100	17
			Quadratic	.742	17
Visualizations * Datasets	Linear	Linear		.077	1
	Quadratic	Linear		.040	1
	Cubic	Linear		.082	1
	Order 4	Linear		.043	1
Error (Visualizations*Datasets)	Linear	Linear		.648	17
	Quadratic	Linear		.472	17
	Cubic	Linear		.858	17
	Order 4	Linear		.933	17
Visualizations * Attributes	Linear		Linear	.029	1
			Quadratic	.000	1
	Quadratic		Linear	.016	1
			Quadratic	.520	1
	Cubic		Linear	.139	1
			Quadratic	.006	1
	Order 4		Linear	.019	1
			Quadratic	.148	1
Error (Visualizations*Attributes)	Linear		Linear	.844	17
			Quadratic	1.192	17
	Quadratic		Linear	1.301	17
			Quadratic	.964	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Mean Square	F
Visualizations	Linear			.501	5.794
	Quadratic			.575	22.813
	Cubic			.001	.007
	Order 4			.870	9.109
Error(Visualizations)	Linear			.086	
	Quadratic			.025	
	Cubic			.101	
	Order 4			.095	
Datasets		Linear		.001	.013
Error(Datasets)		Linear		.068	
Attributes			Linear	.051	.791
			Quadratic	.976	22.356
Error(Attributes)			Linear	.065	
			Quadratic	.044	
Visualizations * Datasets	Linear	Linear		.077	2.022
	Quadratic	Linear		.040	1.458
	Cubic	Linear		.082	1.615
	Order 4	Linear		.043	.785
Error (Visualizations*Datasets)	Linear	Linear		.038	
	Quadratic	Linear		.028	
	Cubic	Linear		.050	
	Order 4	Linear		.055	
Visualizations * Attributes	Linear		Linear	.029	.593
			Quadratic	.000	.005
	Quadratic		Linear	.016	.203
			Quadratic	.520	9.174
	Cubic		Linear	.139	2.592
			Quadratic	.006	.078
	Order 4		Linear	.019	.283
			Quadratic	.148	1.350
Error (Visualizations*Attributes)	Linear		Linear	.050	
			Quadratic	.070	
	Quadratic		Linear	.077	
			Quadratic	.057	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Sig.	Partial Eta Squared
Visualizations	Linear			.028	.254
	Quadratic			.000	.573
	Cubic			.936	.000
	Order 4			.008	.349
Error(Visualizations)	Linear				
	Quadratic				
	Cubic				
	Order 4				
Datasets		Linear		.912	.001
Error(Datasets)		Linear			
Attributes			Linear	.386	.044
			Quadratic	.000	.568
Error(Attributes)			Linear		
			Quadratic		
Visualizations * Datasets	Linear	Linear		.173	.106
	Quadratic	Linear		.244	.079
	Cubic	Linear		.221	.087
	Order 4	Linear		.388	.044
Error (Visualizations*Datasets)	Linear	Linear			
	Quadratic	Linear			
	Cubic	Linear			
	Order 4	Linear			
Visualizations * Attributes	Linear		Linear	.452	.034
			Quadratic	.944	.000
	Quadratic		Linear	.658	.012
			Quadratic	.008	.350
	Cubic		Linear	.126	.132
			Quadratic	.784	.005
	Order 4		Linear	.601	.016
			Quadratic	.261	.074
Error (Visualizations*Attributes)	Linear		Linear		
			Quadratic		
	Quadratic		Linear		
			Quadratic		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Noncent. Parameter	Observed Power[a]
Visualizations	Linear			5.794	.622
	Quadratic			22.813	.994
	Cubic			.007	.051
	Order 4			9.109	.812
Error(Visualizations)	Linear				
	Quadratic				
	Cubic				
	Order 4				
Datasets		Linear		.013	.051
Error(Datasets)		Linear			
Attributes			Linear	.791	.134
			Quadratic	22.356	.994
Error(Attributes)			Linear		
			Quadratic		
Visualizations * Datasets	Linear	Linear		2.022	.269
	Quadratic	Linear		1.458	.207
	Cubic	Linear		1.615	.224
	Order 4	Linear		.785	.133
Error (Visualizations*Datasets)	Linear	Linear			
	Quadratic	Linear			
	Cubic	Linear			
	Order 4	Linear			
Visualizations * Attributes	Linear		Linear	.593	.113
			Quadratic	.005	.051
	Quadratic		Linear	.203	.071
			Quadratic	9.174	.814
	Cubic		Linear	2.592	.330
			Quadratic	.078	.058
	Order 4		Linear	.283	.079
			Quadratic	1.350	.195
Error (Visualizations*Attributes)	Linear		Linear		
			Quadratic		
	Quadratic		Linear		
			Quadratic		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Type III Sum of Squares	df
	Cubic		Linear	.912	17
			Quadratic	1.406	17
	Order 4		Linear	1.136	17
			Quadratic	1.868	17
Datasets * Attributes		Linear	Linear	.275	1
			Quadratic	.006	1
Error(Datasets*Attributes)		Linear	Linear	1.313	17
			Quadratic	.899	17
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.055	1
			Quadratic	.018	1
	Quadratic	Linear	Linear	.879	1
			Quadratic	.127	1
	Cubic	Linear	Linear	.265	1
			Quadratic	.074	1
	Order 4	Linear	Linear	1.322	1
			Quadratic	.155	1
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear	1.450	17
			Quadratic	2.374	17
	Quadratic	Linear	Linear	1.264	17
			Quadratic	.344	17
	Cubic	Linear	Linear	1.102	17
			Quadratic	2.025	17
	Order 4	Linear	Linear	.870	17
			Quadratic	2.379	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Mean Square	F
	Cubic		Linear	.054	
			Quadratic	.083	
	Order 4		Linear	.067	
			Quadratic	.110	
Datasets * Attributes		Linear	Linear	.275	3.567
			Quadratic	.006	.120
Error(Datasets*Attributes)		Linear	Linear	.077	
			Quadratic	.053	
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.055	.639
			Quadratic	.018	.127
	Quadratic	Linear	Linear	.879	11.821
			Quadratic	.127	6.254
	Cubic	Linear	Linear	.265	4.086
			Quadratic	.074	.625
	Order 4	Linear	Linear	1.322	25.829
			Quadratic	.155	1.105
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear	.085	
			Quadratic	.140	
	Quadratic	Linear	Linear	.074	
			Quadratic	.020	
	Cubic	Linear	Linear	.065	
			Quadratic	.119	
	Order 4	Linear	Linear	.051	
			Quadratic	.140	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Sig.	Partial Eta Squared
	Cubic		Linear		
			Quadratic		
	Order 4		Linear		
			Quadratic		
Datasets * Attributes		Linear	Linear	.076	.173
			Quadratic	.733	.007
Error(Datasets*Attributes)		Linear	Linear		
			Quadratic		
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.435	.036
			Quadratic	.726	.007
	Quadratic	Linear	Linear	.003	.410
			Quadratic	.023	.269
	Cubic	Linear	Linear	.059	.194
			Quadratic	.440	.035
	Order 4	Linear	Linear	.000	.603
			Quadratic	.308	.061
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear		
			Quadratic		
	Quadratic	Linear	Linear		
			Quadratic		
	Cubic	Linear	Linear		
			Quadratic		
	Order 4	Linear	Linear		
			Quadratic		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Noncent. Parameter	Observed Power[a]
	Cubic		Linear		
			Quadratic		
	Order 4		Linear		
			Quadratic		
Datasets * Attributes		Linear	Linear	3.567	.429
			Quadratic	.120	.062
Error(Datasets*Attributes)		Linear	Linear		
			Quadratic		
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.639	.117
			Quadratic	.127	.063
	Quadratic	Linear	Linear	11.821	.899
			Quadratic	6.254	.655
	Cubic	Linear	Linear	4.086	.479
			Quadratic	.625	.116
	Order 4	Linear	Linear	25.829	.998
			Quadratic	1.105	.168
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear		
			Quadratic		
	Quadratic	Linear	Linear		
			Quadratic		
	Cubic	Linear	Linear		
			Quadratic		
	Order 4	Linear	Linear		
			Quadratic		

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	601.427	1	601.427	464.675	.000	.965
Error	22.003	17	1.294			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	464.675	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Visualizations

Estimates

Measure: MEASURE_1

Visualizations	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	1.048	.056	.929	1.167
2	1.141	.072	.989	1.293
3	1.030	.055	.914	1.146
4	1.095	.042	1.007	1.183
5	.963	.041	.877	1.050

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualizations	(J) Visualizations	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]... Lower Bound
1	2	-.093	.036	.187	-.208
	3	.018	.030	1.000	-.080
	4	-.047	.034	1.000	-.156
	5	.085	.035	.276	-.029
2	1	.093	.036	.187	-.022
	3	.111	.043	.192	-.027
	4	.046	.047	1.000	-.106
	5	.178*	.041	.004	.046
3	1	-.018	.030	1.000	-.116
	2	-.111	.043	.192	-.249
	4	-.065	.043	1.000	-.204
	5	.067	.030	.420	-.031
4	1	.047	.034	1.000	-.063
	2	-.046	.047	1.000	-.198
	3	.065	.043	1.000	-.075
	5	.131*	.034	.011	.023
5	1	-.085	.035	.276	-.198
	2	-.178*	.041	.004	-.309
	3	-.067	.030	.420	-.164
	4	-.131*	.034	.011	-.239

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualizations	(J) Visualizations	95% Confidence Interval for [b]... Upper Bound
1	2	.022
	3	.116
	4	.063
	5	.198
2	1	.208
	3	.249
	4	.198
	5	.309
3	1	.080
	2	.027
	4	.075
	5	.164
4	1	.156
	2	.106
	3	.204
	5	.239
5	1	.029
	2	-.046
	3	.031
	4	-.023

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	.685	7.602[a]	4.000	14.000	.002	.685
Wilks' lambda	.315	7.602[a]	4.000	14.000	.002	.685
Hotelling's trace	2.172	7.602[a]	4.000	14.000	.002	.685
Roy's largest root	2.172	7.602[a]	4.000	14.000	.002	.685

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	30.408	.975
Wilks' lambda	30.408	.975
Hotelling's trace	30.408	.975
Roy's largest root	30.408	.975

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

a. Exact statistic

b. Computed using alpha = .05

2. Datasets

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
Datasets	Mean	Std. Error	Lower Bound	Upper Bound
1	1.057	.055	.940	1.173
2	1.054	.045	.960	1.148

Pairwise Comparisons

Measure: MEASURE_1

(I) Datasets	(J) Datasets	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	.003	.022	.912	-.045	.050
2	1	-.003	.022	.912	-.050	.045

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	.001	.013[a]	1.000	17.000	.912	.001
Wilks' lambda	.999	.013[a]	1.000	17.000	.912	.001
Hotelling's trace	.001	.013[a]	1.000	17.000	.912	.001
Roy's largest root	.001	.013[a]	1.000	17.000	.912	.001

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	.013	.051
Wilks' lambda	.013	.051
Hotelling's trace	.013	.051
Roy's largest root	.013	.051

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

a. Exact statistic

b. Computed using alpha = .05

3. Attributes

Estimates

Measure: MEASURE_1

Attributes	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	1.073	.058	.951	1.196
2	.995	.051	.887	1.103
3	1.097	.043	1.007	1.187

Pairwise Comparisons

Measure: MEASURE_1

(I) Attributes	(J) Attributes	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	.078*	.023	.010	.017	.139
	3	-.024	.027	1.000	-.095	.047
2	1	-.078*	.023	.010	-.139	-.017
	3	-.102*	.024	.001	-.165	-.040
3	1	.024	.027	1.000	-.047	.095
	2	.102*	.024	.001	.040	.165

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	.575	10.811[a]	2.000	16.000	.001	.575
Wilks' lambda	.425	10.811[a]	2.000	16.000	.001	.575
Hotelling's trace	1.351	10.811[a]	2.000	16.000	.001	.575
Roy's largest root	1.351	10.811[a]	2.000	16.000	.001	.575

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	21.623	.973
Wilks' lambda	21.623	.973
Hotelling's trace	21.623	.973
Roy's largest root	21.623	.973

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

a. Exact statistic

b. Computed using alpha = .05

4. Visualizations * Datasets

Measure: MEASURE_1

				95% Confidence Interval	
Visualizations	Datasets	Mean	Std. Error	Lower Bound	Upper Bound
1	1	1.054	.065	.917	1.190
	2	1.042	.053	.930	1.155
2	1	1.102	.075	.943	1.260
	2	1.180	.076	1.019	1.341
3	1	1.035	.063	.903	1.168
	2	1.025	.054	.910	1.140
4	1	1.107	.057	.986	1.228
	2	1.082	.039	1.000	1.164
5	1	.986	.045	.891	1.080
	2	.941	.043	.851	1.031

5. Visualizations * Attributes

Measure: MEASURE_1

Visualizations	Attributes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.128	.068	.984	1.272
	2	.937	.070	.790	1.083
	3	1.079	.055	.962	1.196
2	1	1.122	.086	.941	1.304
	2	1.088	.080	.920	1.256
	3	1.212	.074	1.055	1.369
3	1	1.007	.061	.878	1.136
	2	1.060	.065	.924	1.196
	3	1.023	.066	.883	1.163
4	1	1.125	.063	.992	1.258
	2	1.030	.060	.902	1.157
	3	1.129	.050	1.023	1.235
5	1	.985	.070	.836	1.134
	2	.862	.057	.741	.983
	3	1.043	.025	.989	1.096

6. Datasets * Attributes

Measure: MEASURE_1

Datasets	Attributes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.049	.066	.911	1.188
	2	.992	.064	.856	1.127
	3	1.129	.044	1.035	1.222
2	1	1.097	.057	.977	1.217
	2	.999	.045	.904	1.093
	3	1.066	.047	.968	1.164