```
 GET
  FILE='C:\Users\Bahador\Desktop\SPSS-Analysis\Filter\Filter_Time.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
GLM Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Num_Num_Car Bar_Num_Num_Movie Bar_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(OVERALL)
  /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
    Datasets*Attributes Visualizations*Datasets*Attributes.
```

General Linear Model

Notes

Output Created		24-MAR-2017 15:22:56
Comments		
Input	Data	C:\Users\Bahador\Desktop\SPSS-Analysis\Filter\Filter_Time.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	18
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Notes

Syntax	GLM Bar_Nom_Num_Car Bar_Nom_Num_Movie Bar_Num_Num_Car Bar_Num_Num_Movie Bar_Ord_Num_Car Bar_Ord_Num_Movie Line_Nom_Num_Car Line_Nom_Num_Movie Line_Num_Num_Car Line_Num_Num_Movie Line_Ord_Num_Car Line_Ord_Num_Movie Pie_Nom_Num_Car Pie_Nom_Num_Movie Pie_Num_Num_Car Pie_Num_Num_Movie Pie_Ord_Num_Car Pie_Ord_Num_Movie Scatter_Nom_Num_Car Scatter_Nom_Num_Movie Scatter_Num_Num_Car Scatter_Num_Num_Movie Scatter_Ord_Num_Car Scatter_Ord_Num_Movie Table_Nom_Num_Car Table_Nom_Num_Movie Table_Num_Num_Car Table_Num_Num_Movie Table_Ord_Num_Car Table_Ord_Num_Movie /WSFACTOR=Visualizations 5 Polynomial Datasets 2 Polynomial Attributes 3 Polynomial /METHOD=SSTYPE(3) /EMMEANS=TABLES (OVERALL) /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

Notes

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

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

Warnings

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

Within-Subjects Factors

Measure: MEASURE_1

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	1.1783	.29204	18
Bar_Nom_Num_Movie	1.2106	.22405	18
Bar_Num_Num_Car	1.3146	.32576	18
Bar_Num_Num_Movie	1.1679	.32626	18
Bar_Ord_Num_Car	1.1311	.22326	18
Bar_Ord_Num_Movie	1.1625	.17183	18
Line_Nom_Num_Car	1.3243	.30543	18
Line_Nom_Num_Movie	1.4214	.25749	18
Line_Num_Num_Car	1.4257	.35666	18
Line_Num_Num_Movie	1.3961	.37086	18
Line_Ord_Num_Car	1.3968	.42931	18
Line_Ord_Num_Movie	1.3513	.29008	18
Pie_Nom_Num_Car	1.3773	.21808	18
Pie_Nom_Num_Movie	1.3819	.25627	18
Pie_Num_Num_Car	1.3508	.31241	18
Pie_Num_Num_Movie	1.4225	.36998	18
Pie_Ord_Num_Car	1.3235	.28021	18
Pie_Ord_Num_Movie	1.4597	.27117	18
Scatter_Nom_Num_Car	1.3271	.34941	18
Scatter_Nom_Num_Movie	1.3834	.15241	18
Scatter_Num_Num_Car	1.3903	.29511	18
Scatter_Num_Num_Movie	1.4734	.29562	18
Scatter_Ord_Num_Car	1.3429	.26395	18
Scatter_Ord_Num_Movie	1.4606	.22469	18
Table_Nom_Num_Car	1.0728	.33556	18
Table_Nom_Num_Movie	1.1453	.21537	18
Table_Num_Num_Car	1.2868	.25938	18
Table_Num_Num_Movie	1.2957	.33199	18
Table_Ord_Num_Car	1.1645	.39223	18
Table_Ord_Num_Movie	1.2777	.30205	18

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df
Visualizations	Pillai's Trace	.878	25.169[b]	4.000	14.000
	Wilks' Lambda	.122	25.169[b]	4.000	14.000
	Hotelling's Trace	7.191	25.169[b]	4.000	14.000
	Roy's Largest Root	7.191	25.169[b]	4.000	14.000
Datasets	Pillai's Trace	.015	.252[b]	1.000	17.000
	Wilks' Lambda	.985	.252[b]	1.000	17.000
	Hotelling's Trace	.015	.252[b]	1.000	17.000
	Roy's Largest Root	.015	.252[b]	1.000	17.000
Attributes	Pillai's Trace	.122	1.110[b]	2.000	16.000
	Wilks' Lambda	.878	1.110[b]	2.000	16.000
	Hotelling's Trace	.139	1.110[b]	2.000	16.000
	Roy's Largest Root	.139	1.110[b]	2.000	16.000
Visualizations * Datasets	Pillai's Trace	.384	2.183[b]	4.000	14.000
	Wilks' Lambda	.616	2.183[b]	4.000	14.000
	Hotelling's Trace	.624	2.183[b]	4.000	14.000
	Roy's Largest Root	.624	2.183[b]	4.000	14.000
Visualizations * Attributes	Pillai's Trace	.227	.367[b]	8.000	10.000
	Wilks' Lambda	.773	.367[b]	8.000	10.000
	Hotelling's Trace	.294	.367[b]	8.000	10.000
	Roy's Largest Root	.294	.367[b]	8.000	10.000
Datasets * Attributes	Pillai's Trace	.201	2.014[b]	2.000	16.000
	Wilks' Lambda	.799	2.014[b]	2.000	16.000
	Hotelling's Trace	.252	2.014[b]	2.000	16.000
	Roy's Largest Root	.252	2.014[b]	2.000	16.000
Visualizations * Datasets * Attributes	Pillai's Trace	.447	1.010[b]	8.000	10.000
	Wilks' Lambda	.553	1.010[b]	8.000	10.000
	Hotelling's Trace	.808	1.010[b]	8.000	10.000
	Roy's Largest Root	.808	1.010[b]	8.000	10.000

Multivariate Tests[a]

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualizations	Pillai's Trace	.000	.878	100.677
	Wilks' Lambda	.000	.878	100.677
	Hotelling's Trace	.000	.878	100.677
	Roy's Largest Root	.000	.878	100.677
Datasets	Pillai's Trace	.622	.015	.252
	Wilks' Lambda	.622	.015	.252
	Hotelling's Trace	.622	.015	.252
	Roy's Largest Root	.622	.015	.252
Attributes	Pillai's Trace	.354	.122	2.221
	Wilks' Lambda	.354	.122	2.221
	Hotelling's Trace	.354	.122	2.221
	Roy's Largest Root	.354	.122	2.221
Visualizations * Datasets	Pillai's Trace	.124	.384	8.732
	Wilks' Lambda	.124	.384	8.732
	Hotelling's Trace	.124	.384	8.732
	Roy's Largest Root	.124	.384	8.732
Visualizations * Attributes	Pillai's Trace	.915	.227	2.939
	Wilks' Lambda	.915	.227	2.939
	Hotelling's Trace	.915	.227	2.939
	Roy's Largest Root	.915	.227	2.939
Datasets * Attributes	Pillai's Trace	.166	.201	4.029
	Wilks' Lambda	.166	.201	4.029
	Hotelling's Trace	.166	.201	4.029
	Roy's Largest Root	.166	.201	4.029
Visualizations * Datasets * Attributes	Pillai's Trace	.484	.447	8.083
	Wilks' Lambda	.484	.447	8.083
	Hotelling's Trace	.484	.447	8.083
	Roy's Largest Root	.484	.447	8.083

Multivariate Tests[a]

Effect		Observed Power[c]
Visualizations	Pillai's Trace	1.000
	Wilks' Lambda	1.000
	Hotelling's Trace	1.000
	Roy's Largest Root	1.000
Datasets	Pillai's Trace	.076
	Wilks' Lambda	.076
	Hotelling's Trace	.076
	Roy's Largest Root	.076
Attributes	Pillai's Trace	.211
	Wilks' Lambda	.211
	Hotelling's Trace	.211
	Roy's Largest Root	.211
Visualizations * Datasets	Pillai's Trace	.492
	Wilks' Lambda	.492
	Hotelling's Trace	.492
	Roy's Largest Root	.492
Visualizations * Attributes	Pillai's Trace	.113
	Wilks' Lambda	.113
	Hotelling's Trace	.113
	Roy's Largest Root	.113
Datasets * Attributes	Pillai's Trace	.354
	Wilks' Lambda	.354
	Hotelling's Trace	.354
	Roy's Largest Root	.354
Visualizations * Datasets * Attributes	Pillai's Trace	.258
	Wilks' Lambda	.258
	Hotelling's Trace	.258
	Roy's Largest Root	.258

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	.362	15.666	9	.076	.735
Datasets	1.000	.000	0	.	1.000
Attributes	.841	2.772	2	.250	.863
Visualizations * Datasets	.334	16.902	9	.051	.683
Visualizations * Attributes	.026	51.632	35	.043	.617
Datasets * Attributes	.806	3.460	2	.177	.837
Visualizations * Datasets * Attributes	.043	44.546	35	.149	.575

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Epsilon[b] Huynh-Feldt	Lower-bound
Visualizations	.906	.250
Datasets	1.000	1.000
Attributes	.951	.500
Visualizations * Datasets	.826	.250
Visualizations * Attributes	.900	.125
Datasets * Attributes	.918	.500
Visualizations * Datasets * Attributes	.815	.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	4.633	4	1.158	19.410
	Greenhouse-Geisser	4.633	2.941	1.575	19.410
	Huynh-Feldt	4.633	3.623	1.279	19.410
	Lower-bound	4.633	1.000	4.633	19.410
Error(Visualizations)	Sphericity Assumed	4.058	68	.060	
	Greenhouse-Geisser	4.058	49.997	.081	
	Huynh-Feldt	4.058	61.593	.066	
	Lower-bound	4.058	17.000	.239	
Datasets	Sphericity Assumed	.033	1	.033	.252
	Greenhouse-Geisser	.033	1.000	.033	.252
	Huynh-Feldt	.033	1.000	.033	.252
	Lower-bound	.033	1.000	.033	.252
Error(Datasets)	Sphericity Assumed	2.249	17	.132	
	Greenhouse-Geisser	2.249	17.000	.132	
	Huynh-Feldt	2.249	17.000	.132	
	Lower-bound	2.249	17.000	.132	
Attributes	Sphericity Assumed	.330	2	.165	1.237
	Greenhouse-Geisser	.330	1.726	.192	1.237
	Huynh-Feldt	.330	1.902	.174	1.237
	Lower-bound	.330	1.000	.330	1.237
Error(Attributes)	Sphericity Assumed	4.540	34	.134	
	Greenhouse-Geisser	4.540	29.334	.155	
	Huynh-Feldt	4.540	32.342	.140	
	Lower-bound	4.540	17.000	.267	
Visualizations * Datasets	Sphericity Assumed	.428	4	.107	2.381
	Greenhouse-Geisser	.428	2.732	.157	2.381
	Huynh-Feldt	.428	3.306	.129	2.381
	Lower-bound	.428	1.000	.428	2.381
Error (Visualizations*Datasets)	Sphericity Assumed	3.055	68	.045	
	Greenhouse-Geisser	3.055	46.438	.066	
	Huynh-Feldt	3.055	56.201	.054	
	Lower-bound	3.055	17.000	.180	
Visualizations * Attributes	Sphericity Assumed	.271	8	.034	.605
	Greenhouse-Geisser	.271	4.935	.055	.605

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualizations	Sphericity Assumed	.000	.533	77.639
	Greenhouse-Geisser	.000	.533	57.084
	Huynh-Feldt	.000	.533	70.324
	Lower-bound	.000	.533	19.410
Error(Visualizations)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets	Sphericity Assumed	.622	.015	.252
	Greenhouse-Geisser	.622	.015	.252
	Huynh-Feldt	.622	.015	.252
	Lower-bound	.622	.015	.252
Error(Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Attributes	Sphericity Assumed	.303	.068	2.475
	Greenhouse-Geisser	.300	.068	2.135
	Huynh-Feldt	.302	.068	2.354
	Lower-bound	.281	.068	1.237
Error(Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Datasets	Sphericity Assumed	.060	.123	9.526
	Greenhouse-Geisser	.087	.123	6.505
	Huynh-Feldt	.073	.123	7.873
	Lower-bound	.141	.123	2.381
Error (Visualizations*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Attributes	Sphericity Assumed	.772	.034	4.840
	Greenhouse-Geisser	.694	.034	2.986

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power[a]
Visualizations	Sphericity Assumed	1.000
	Greenhouse-Geisser	1.000
	Huynh-Feldt	1.000
	Lower-bound	.986
Error(Visualizations)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets	Sphericity Assumed	.076
	Greenhouse-Geisser	.076
	Huynh-Feldt	.076
	Lower-bound	.076
Error(Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Attributes	Sphericity Assumed	.251
	Greenhouse-Geisser	.233
	Huynh-Feldt	.245
	Lower-bound	.183
Error(Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Datasets	Sphericity Assumed	.657
	Greenhouse-Geisser	.534
	Huynh-Feldt	.594
	Lower-bound	.308
Error (Visualizations*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Attributes	Sphericity Assumed	.271
	Greenhouse-Geisser	.210

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	.271	7.198	.038	.605
	Lower-bound	.271	1.000	.271	.605
Error (Visualizations*Attributes)	Sphericity Assumed	7.607	136	.056	
	Greenhouse-Geisser	7.607	83.900	.091	
	Huynh-Feldt	7.607	122.358	.062	
	Lower-bound	7.607	17.000	.447	
Datasets * Attributes	Sphericity Assumed	.441	2	.220	1.384
	Greenhouse-Geisser	.441	1.674	.263	1.384
	Huynh-Feldt	.441	1.836	.240	1.384
	Lower-bound	.441	1.000	.441	1.384
Error(Datasets*Attributes)	Sphericity Assumed	5.413	34	.159	
	Greenhouse-Geisser	5.413	28.465	.190	
	Huynh-Feldt	5.413	31.214	.173	
	Lower-bound	5.413	17.000	.318	
Visualizations * Datasets * Attributes	Sphericity Assumed	.325	8	.041	.729
	Greenhouse-Geisser	.325	4.600	.071	.729
	Huynh-Feldt	.325	6.516	.050	.729
	Lower-bound	.325	1.000	.325	.729
Error (Visualizations*Datasets*Attributes)	Sphericity Assumed	7.575	136	.056	
	Greenhouse-Geisser	7.575	78.199	.097	
	Huynh-Feldt	7.575	110.773	.068	
	Lower-bound	7.575	17.000	.446	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.755	.034	4.354
	Lower-bound	.447	.034	.605
Error (Visualizations*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets * Attributes	Sphericity Assumed	.264	.075	2.767
	Greenhouse-Geisser	.264	.075	2.317
	Huynh-Feldt	.265	.075	2.540
	Lower-bound	.256	.075	1.384
Error(Datasets*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Datasets * Attributes	Sphericity Assumed	.666	.041	5.829
	Greenhouse-Geisser	.593	.041	3.351
	Huynh-Feldt	.639	.041	4.747
	Lower-bound	.405	.041	.729
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	.256
	Lower-bound	.114
Error (Visualizations*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets * Attributes	Sphericity Assumed	.277
	Greenhouse-Geisser	.253
	Huynh-Feldt	.265
	Lower-bound	.199
Error(Datasets*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Datasets * Attributes	Sphericity Assumed	.327
	Greenhouse-Geisser	.240
	Huynh-Feldt	.291
	Lower-bound	.127
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			.014	1
	Quadratic			4.357	1
	Cubic			.001	1
	Order 4			.262	1
Error(Visualizations)	Linear			1.604	17
	Quadratic			.709	17
	Cubic			.946	17
	Order 4			.800	17
Datasets		Linear		.033	1
Error(Datasets)		Linear		2.249	17
Attributes			Linear	.178	1
			Quadratic	.153	1
Error(Attributes)			Linear	3.088	17
			Quadratic	1.452	17
Visualizations * Datasets	Linear	Linear		.399	1
	Quadratic	Linear		.028	1
	Cubic	Linear		.001	1
	Order 4	Linear		4.189E-5	1
Error (Visualizations*Datasets)	Linear	Linear		.800	17
	Quadratic	Linear		1.189	17
	Cubic	Linear		.709	17
	Order 4	Linear		.358	17
Visualizations * Attributes	Linear		Linear	.007	1
			Quadratic	.070	1
	Quadratic		Linear	.089	1
			Quadratic	.022	1
	Cubic		Linear	.003	1
			Quadratic	.038	1
	Order 4		Linear	8.911E-5	1
			Quadratic	.043	1
Error (Visualizations*Attributes)	Linear		Linear	.921	17
			Quadratic	.966	17
	Quadratic		Linear	.937	17
			Quadratic	1.077	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Mean Square	F
Visualizations	Linear			.014	.151
	Quadratic			4.357	104.527
	Cubic			.001	.012
	Order 4			.262	5.560
Error(Visualizations)	Linear			.094	
	Quadratic			.042	
	Cubic			.056	
	Order 4			.047	
Datasets		Linear		.033	.252
Error(Datasets)		Linear		.132	
Attributes			Linear	.178	.980
			Quadratic	.153	1.786
Error(Attributes)			Linear	.182	
			Quadratic	.085	
Visualizations * Datasets	Linear	Linear		.399	8.483
	Quadratic	Linear		.028	.394
	Cubic	Linear		.001	.033
	Order 4	Linear		4.189E-5	.002
Error (Visualizations*Datasets)	Linear	Linear		.047	
	Quadratic	Linear		.070	
	Cubic	Linear		.042	
	Order 4	Linear		.021	
Visualizations * Attributes	Linear		Linear	.007	.128
			Quadratic	.070	1.236
	Quadratic		Linear	.089	1.609
			Quadratic	.022	.340
	Cubic		Linear	.003	.074
			Quadratic	.038	.551
	Order 4		Linear	8.911E-5	.001
			Quadratic	.043	1.058
Error (Visualizations*Attributes)	Linear		Linear	.054	
			Quadratic	.057	
	Quadratic		Linear	.055	
			Quadratic	.063	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Sig.	Partial Eta Squared
Visualizations	Linear			.702	.009
	Quadratic			.000	.860
	Cubic			.916	.001
	Order 4			.031	.246
Error(Visualizations)	Linear				
	Quadratic				
	Cubic				
	Order 4				
Datasets		Linear		.622	.015
Error(Datasets)		Linear			
Attributes			Linear	.336	.054
			Quadratic	.199	.095
Error(Attributes)			Linear		
			Quadratic		
Visualizations * Datasets	Linear	Linear		.010	.333
	Quadratic	Linear		.538	.023
	Cubic	Linear		.857	.002
	Order 4	Linear		.965	.000
Error (Visualizations*Datasets)	Linear	Linear			
	Quadratic	Linear			
	Cubic	Linear			
	Order 4	Linear			
Visualizations * Attributes	Linear		Linear	.724	.007
			Quadratic	.282	.068
	Quadratic		Linear	.222	.086
			Quadratic	.567	.020
	Cubic		Linear	.789	.004
			Quadratic	.468	.031
	Order 4		Linear	.972	.000
			Quadratic	.318	.059
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			.151	.066
	Quadratic			104.527	1.000
	Cubic			.012	.051
	Order 4			5.560	.604
Error(Visualizations)	Linear				
	Quadratic				
	Cubic				
	Order 4				
Datasets		Linear		.252	.076
Error(Datasets)		Linear			
Attributes			Linear	.980	.155
			Quadratic	1.786	.243
Error(Attributes)			Linear		
			Quadratic		
Visualizations * Datasets	Linear	Linear		8.483	.784
	Quadratic	Linear		.394	.091
	Cubic	Linear		.033	.053
	Order 4	Linear		.002	.050
Error (Visualizations*Datasets)	Linear	Linear			
	Quadratic	Linear			
	Cubic	Linear			
	Order 4	Linear			
Visualizations * Attributes	Linear		Linear	.128	.063
			Quadratic	1.236	.183
	Quadratic		Linear	1.609	.224
			Quadratic	.340	.085
	Cubic		Linear	.074	.058
			Quadratic	.551	.108
	Order 4		Linear	.001	.050
			Quadratic	1.058	.163
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	.623	17
			Quadratic	1.166	17
	Order 4		Linear	1.231	17
			Quadratic	.685	17
Datasets * Attributes		Linear	Linear	.255	1
			Quadratic	.186	1
Error(Datasets*Attributes)		Linear	Linear	3.580	17
			Quadratic	1.833	17
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.005	1
			Quadratic	.056	1
	Quadratic	Linear	Linear	.137	1
			Quadratic	.031	1
	Cubic	Linear	Linear	.024	1
			Quadratic	.016	1
	Order 4	Linear	Linear	.052	1
			Quadratic	.004	1
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear	1.374	17
			Quadratic	1.273	17
	Quadratic	Linear	Linear	.973	17
			Quadratic	.317	17
	Cubic	Linear	Linear	.673	17
			Quadratic	1.003	17
	Order 4	Linear	Linear	1.348	17
			Quadratic	.613	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Mean Square	F
	Cubic		Linear	.037	
			Quadratic	.069	
	Order 4		Linear	.072	
			Quadratic	.040	
Datasets * Attributes		Linear	Linear	.255	1.210
			Quadratic	.186	1.723
Error(Datasets*Attributes)		Linear	Linear	.211	
			Quadratic	.108	
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.005	.068
			Quadratic	.056	.743
	Quadratic	Linear	Linear	.137	2.391
			Quadratic	.031	1.686
	Cubic	Linear	Linear	.024	.605
			Quadratic	.016	.265
	Order 4	Linear	Linear	.052	.653
			Quadratic	.004	.104
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear	.081	
			Quadratic	.075	
	Quadratic	Linear	Linear	.057	
			Quadratic	.019	
	Cubic	Linear	Linear	.040	
			Quadratic	.059	
	Order 4	Linear	Linear	.079	
			Quadratic	.036	

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	.287	.066
			Quadratic	.207	.092
Error(Datasets*Attributes)		Linear	Linear		
			Quadratic		
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.798	.004
			Quadratic	.401	.042
	Quadratic	Linear	Linear	.140	.123
			Quadratic	.212	.090
	Cubic	Linear	Linear	.447	.034
			Quadratic	.613	.015
	Order 4	Linear	Linear	.430	.037
			Quadratic	.751	.006
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	1.210	.180
			Quadratic	1.723	.236
Error(Datasets*Attributes)		Linear	Linear		
			Quadratic		
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.068	.057
			Quadratic	.743	.129
	Quadratic	Linear	Linear	2.391	.309
			Quadratic	1.686	.232
	Cubic	Linear	Linear	.605	.114
			Quadratic	.265	.078
	Order 4	Linear	Linear	.653	.119
			Quadratic	.104	.061
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	932.210	1	932.210	1522.590	.000	.989
Error	10.408	17	.612			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power[a]
Intercept	1522.590	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

		95% Confidence Interval	
Mean	Std. Error	Lower Bound	Upper Bound
1.314	.034	1.243	1.385

2. Visualizations

Estimates

Measure: MEASURE_1

			95% Confidence Interval	
Visualizations	Mean	Std. Error	Lower Bound	Upper Bound
1	1.194	.041	1.108	1.281
2	1.386	.045	1.291	1.481
3	1.386	.038	1.305	1.467
4	1.396	.034	1.324	1.469
5	1.207	.039	1.124	1.290

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualizations	(J) Visualizations	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence [b]... Lower Bound
1	2	-.192*	.039	.001	-.317
	3	-.192*	.034	.000	-.303
	4	-.202*	.030	.000	-.299
	5	-.013	.044	1.000	-.156
2	1	.192*	.039	.001	.067
	3	-2.265E-5	.036	1.000	-.116
	4	-.010	.028	1.000	-.102
	5	.179*	.037	.002	.060
3	1	.192*	.034	.000	.081
	2	2.265E-5	.036	1.000	-.116
	4	-.010	.019	1.000	-.071
	5	.179*	.030	.000	.082
4	1	.202*	.030	.000	.105
	2	.010	.028	1.000	-.081
	3	.010	.019	1.000	-.051
	5	.189*	.027	.000	.101
5	1	.013	.044	1.000	-.130
	2	-.179*	.037	.002	-.298
	3	-.179*	.030	.000	-.275
	4	-.189*	.027	.000	-.277

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualizations	(J) Visualizations	95% Confidence Interval for [b]... Upper Bound
1	2	-.067
	3	-.081
	4	-.105
	5	.130
2	1	.317
	3	.116
	4	.081
	5	.298
3	1	.303
	2	.116
	4	.051
	5	.275
4	1	.299
	2	.102
	3	.071
	5	.277
5	1	.156
	2	-.060
	3	-.082
	4	-.101

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	.878	25.169[a]	4.000	14.000	.000	.878
Wilks' lambda	.122	25.169[a]	4.000	14.000	.000	.878
Hotelling's trace	7.191	25.169[a]	4.000	14.000	.000	.878
Roy's largest root	7.191	25.169[a]	4.000	14.000	.000	.878

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	100.677	1.000
Wilks' lambda	100.677	1.000
Hotelling's trace	100.677	1.000
Roy's largest root	100.677	1.000

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

3. Datasets

Estimates

Measure: MEASURE_1

Datasets	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	1.306	.033	1.237	1.375
2	1.322	.041	1.235	1.408

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	-.016	.031	.622	-.082	.050
2	1	.016	.031	.622	-.050	.082

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	.015	.252[a]	1.000	17.000	.622	.015
Wilks' lambda	.985	.252[a]	1.000	17.000	.622	.015
Hotelling's trace	.015	.252[a]	1.000	17.000	.622	.015
Roy's largest root	.015	.252[a]	1.000	17.000	.622	.015

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	.252	.076
Wilks' lambda	.252	.076
Hotelling's trace	.252	.076
Roy's largest root	.252	.076

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

4. Attributes

Estimates

Measure: MEASURE_1

Attributes	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	1.304	.051	1.197	1.410
2	1.290	.037	1.211	1.369
3	1.348	.030	1.284	1.412

Pairwise Comparisons

Measure: MEASURE_1

(I) Attributes	(J) Attributes	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	.013	.032	1.000	-.070	.097
	3	-.044	.045	1.000	-.164	.075
2	1	-.013	.032	1.000	-.097	.070
	3	-.058	.038	.435	-.159	.043
3	1	.044	.045	1.000	-.075	.164
	2	.058	.038	.435	-.043	.159

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	.122	1.110[a]	2.000	16.000	.354	.122
Wilks' lambda	.878	1.110[a]	2.000	16.000	.354	.122
Hotelling's trace	.139	1.110[a]	2.000	16.000	.354	.122
Roy's largest root	.139	1.110[a]	2.000	16.000	.354	.122

Multivariate Tests

	Noncent. Parameter	Observed Power[b]
Pillai's trace	2.221	.211
Wilks' lambda	2.221	.211
Hotelling's trace	2.221	.211
Roy's largest root	2.221	.211

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

5. Visualizations * Datasets

Measure: MEASURE_1

Visualizations	Datasets	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.234	.045	1.140	1.329
	2	1.154	.041	1.067	1.241
2	1	1.390	.053	1.279	1.502
	2	1.381	.058	1.259	1.504
3	1	1.370	.041	1.284	1.456
	2	1.402	.048	1.300	1.504
4	1	1.367	.038	1.286	1.447
	2	1.426	.047	1.327	1.524
5	1	1.168	.032	1.101	1.236
	2	1.246	.054	1.131	1.360

6. Visualizations * Attributes

Measure: MEASURE_1

Visualizations	Attributes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.173	.066	1.034	1.312
	2	1.171	.046	1.074	1.268
	3	1.239	.047	1.140	1.337
2	1	1.360	.062	1.229	1.491
	2	1.409	.065	1.272	1.546
	3	1.389	.037	1.311	1.466
3	1	1.400	.060	1.274	1.526
	2	1.353	.054	1.240	1.466
	3	1.405	.046	1.309	1.501
4	1	1.400	.063	1.267	1.534
	2	1.363	.034	1.291	1.436
	3	1.425	.036	1.350	1.501
5	1	1.184	.071	1.035	1.333
	2	1.155	.051	1.047	1.263
	3	1.282	.053	1.171	1.393

7. Datasets * Attributes

Measure: MEASURE_1

Datasets	Attributes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.256	.050	1.151	1.361
	2	1.309	.024	1.258	1.359
	3	1.354	.055	1.239	1.469
2	1	1.351	.062	1.220	1.482
	2	1.272	.060	1.146	1.398
	3	1.342	.037	1.265	1.420