

```

GET
FILE='C:\Users\Bahador\Desktop\SPSS-Analysis\Derived\Derived_Time.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
GLM Bar_Num_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 13:46:31
Comments		
Input	Data	C: \Users\Bahador\Desktop\S PSS- Analysis\Derived\Derived_ 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
Visualizations*Datasets

```

Notes

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

[DataSet1] C:\Users\Bahador\Desktop\SPSS-Analysis\Derived\Derived_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_Nu m_Car
		2	Bar_Nom_Nu m_Movie
		3	Bar_Num_Nu m_Car
	2	1	Bar_Num_Nu m_Movie
		2	Bar_Ord_Nu m_Car
		3	Bar_Ord_Nu m_Movie
2	1	1	Line_Nom_Nu m_Car
		2	Line_Nom_Nu m_Movie
		3	Line_Num_Nu m_Car
	2	1	Line_Num_Nu m_Movie
		2	Line_Ord_Nu m_Car
		3	Line_Ord_Nu m_Movie

Within-Subjects Factors

Measure: MEASURE_1

Visualizations	Datasets	Attributes	Dependent Variable
3	1	1	Pie_Nom_Nu m_Car
		2	Pie_Nom_Nu m_Movie
		3	Pie_Num_Nu m_Car
	2	1	Pie_Num_Nu m_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_N um_Car
		3	Table_Ord_N um_Movie

Descriptive Statistics

	Mean	Std. Deviation	N
Bar_Nom_Num_Car	1.3567	.24195	18
Bar_Nom_Num_Movie	1.3451	.16716	18
Bar_Num_Num_Car	1.2079	.15683	18
Bar_Num_Num_Movie	1.3720	.20885	18
Bar_Ord_Num_Car	1.1368	.20184	18
Bar_Ord_Num_Movie	1.1207	.23212	18
Line_Nom_Num_Car	1.3489	.31370	18
Line_Nom_Num_Movie	1.3411	.27111	18
Line_Num_Num_Car	1.3516	.21856	18
Line_Num_Num_Movie	1.2300	.21687	18
Line_Ord_Num_Car	1.3011	.21433	18
Line_Ord_Num_Movie	1.2205	.28288	18
Pie_Nom_Num_Car	1.2058	.23149	18
Pie_Nom_Num_Movie	1.1153	.21145	18
Pie_Num_Num_Car	1.2969	.31731	18
Pie_Num_Num_Movie	1.2198	.17015	18
Pie_Ord_Num_Car	1.1623	.16192	18
Pie_Ord_Num_Movie	1.2095	.23966	18
Scatter_Nom_Num_Car	1.2534	.17159	18
Scatter_Nom_Num_Movie	1.2786	.29464	18
Scatter_Num_Num_Car	1.3529	.17570	18
Scatter_Num_Num_Movie	1.3254	.21069	18
Scatter_Ord_Num_Car	1.2780	.20886	18
Scatter_Ord_Num_Movie	1.2668	.18700	18
Table_Nom_Num_Car	1.2131	.24301	18
Table_Nom_Num_Movie	1.1318	.17213	18
Table_Num_Num_Car	1.2401	.14345	18
Table_Num_Num_Movie	1.2588	.20606	18
Table_Ord_Num_Car	1.0743	.19138	18
Table_Ord_Num_Movie	1.0242	.12643	18

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
Visualizations	Pillai's Trace	.827	16.709 ^b	4.000	14.000
	Wilks' Lambda	.173	16.709 ^b	4.000	14.000
	Hotelling's Trace	4.774	16.709 ^b	4.000	14.000
	Roy's Largest Root	4.774	16.709 ^b	4.000	14.000
Datasets	Pillai's Trace	.348	9.085 ^b	1.000	17.000
	Wilks' Lambda	.652	9.085 ^b	1.000	17.000
	Hotelling's Trace	.534	9.085 ^b	1.000	17.000
	Roy's Largest Root	.534	9.085 ^b	1.000	17.000
Attributes	Pillai's Trace	.457	6.720 ^b	2.000	16.000
	Wilks' Lambda	.543	6.720 ^b	2.000	16.000
	Hotelling's Trace	.840	6.720 ^b	2.000	16.000
	Roy's Largest Root	.840	6.720 ^b	2.000	16.000
Visualizations * Datasets	Pillai's Trace	.314	1.604 ^b	4.000	14.000
	Wilks' Lambda	.686	1.604 ^b	4.000	14.000
	Hotelling's Trace	.458	1.604 ^b	4.000	14.000
	Roy's Largest Root	.458	1.604 ^b	4.000	14.000
Visualizations * Attributes	Pillai's Trace	.658	2.405 ^b	8.000	10.000
	Wilks' Lambda	.342	2.405 ^b	8.000	10.000
	Hotelling's Trace	1.924	2.405 ^b	8.000	10.000
	Roy's Largest Root	1.924	2.405 ^b	8.000	10.000
Datasets * Attributes	Pillai's Trace	.640	14.222 ^b	2.000	16.000
	Wilks' Lambda	.360	14.222 ^b	2.000	16.000
	Hotelling's Trace	1.778	14.222 ^b	2.000	16.000
	Roy's Largest Root	1.778	14.222 ^b	2.000	16.000
Visualizations * Datasets * Attributes	Pillai's Trace	.831	6.131 ^b	8.000	10.000
	Wilks' Lambda	.169	6.131 ^b	8.000	10.000
	Hotelling's Trace	4.905	6.131 ^b	8.000	10.000
	Roy's Largest Root	4.905	6.131 ^b	8.000	10.000

Multivariate Tests^a

Effect		Sig.	Partial Eta Squared	Noncent. Parameter
Visualizations	Pillai's Trace	.000	.827	66.837
	Wilks' Lambda	.000	.827	66.837
	Hotelling's Trace	.000	.827	66.837
	Roy's Largest Root	.000	.827	66.837
Datasets	Pillai's Trace	.008	.348	9.085
	Wilks' Lambda	.008	.348	9.085
	Hotelling's Trace	.008	.348	9.085
	Roy's Largest Root	.008	.348	9.085
Attributes	Pillai's Trace	.008	.457	13.439
	Wilks' Lambda	.008	.457	13.439
	Hotelling's Trace	.008	.457	13.439
	Roy's Largest Root	.008	.457	13.439
Visualizations * Datasets	Pillai's Trace	.228	.314	6.416
	Wilks' Lambda	.228	.314	6.416
	Hotelling's Trace	.228	.314	6.416
	Roy's Largest Root	.228	.314	6.416
Visualizations * Attributes	Pillai's Trace	.097	.658	19.239
	Wilks' Lambda	.097	.658	19.239
	Hotelling's Trace	.097	.658	19.239
	Roy's Largest Root	.097	.658	19.239
Datasets * Attributes	Pillai's Trace	.000	.640	28.443
	Wilks' Lambda	.000	.640	28.443
	Hotelling's Trace	.000	.640	28.443
	Roy's Largest Root	.000	.640	28.443
Visualizations * Datasets * Attributes	Pillai's Trace	.005	.831	49.051
	Wilks' Lambda	.005	.831	49.051
	Hotelling's Trace	.005	.831	49.051
	Roy's Largest Root	.005	.831	49.051

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	.811
	Wilks' Lambda	.811
	Hotelling's Trace	.811
	Roy's Largest Root	.811
Attributes	Pillai's Trace	.855
	Wilks' Lambda	.855
	Hotelling's Trace	.855
	Roy's Largest Root	.855
Visualizations * Datasets	Pillai's Trace	.370
	Wilks' Lambda	.370
	Hotelling's Trace	.370
	Roy's Largest Root	.370
Visualizations * Attributes	Pillai's Trace	.589
	Wilks' Lambda	.589
	Hotelling's Trace	.589
	Roy's Largest Root	.589
Datasets * Attributes	Pillai's Trace	.994
	Wilks' Lambda	.994
	Hotelling's Trace	.994
	Roy's Largest Root	.994
Visualizations * Datasets * Attributes	Pillai's Trace	.963
	Wilks' Lambda	.963
	Hotelling's Trace	.963
	Roy's Largest Root	.963

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	.368	15.422	9	.082	.679
Datasets	1.000	.000	0	.	1.000
Attributes	.923	1.278	2	.528	.929
Visualizations * Datasets	.752	4.396	9	.884	.880
Visualizations * Attributes	.032	48.729	35	.074	.577
Datasets * Attributes	.386	15.233	2	.000	.620
Visualizations * Datasets * Attributes	.013	61.401	35	.005	.626

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Epsilon ^b	
	Huynh-Feldt	Lower-bound
Visualizations	.821	.250
Datasets	1.000	1.000
Attributes	1.000	.500
Visualizations * Datasets	1.000	.250
Visualizations * Attributes	.818	.125
Datasets * Attributes	.644	.500
Visualizations * Datasets * Attributes	.919	.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	1.603	4	.401	9.649
	Greenhouse-Geisser	1.603	2.718	.590	9.649
	Huynh-Feldt	1.603	3.285	.488	9.649
	Lower-bound	1.603	1.000	1.603	9.649
Error(Visualizations)	Sphericity Assumed	2.825	68	.042	
	Greenhouse-Geisser	2.825	46.198	.061	
	Huynh-Feldt	2.825	55.842	.051	
	Lower-bound	2.825	17.000	.166	
Datasets	Sphericity Assumed	.422	1	.422	9.085
	Greenhouse-Geisser	.422	1.000	.422	9.085
	Huynh-Feldt	.422	1.000	.422	9.085
	Lower-bound	.422	1.000	.422	9.085
Error(Datasets)	Sphericity Assumed	.790	17	.046	
	Greenhouse-Geisser	.790	17.000	.046	
	Huynh-Feldt	.790	17.000	.046	
	Lower-bound	.790	17.000	.046	
Attributes	Sphericity Assumed	.386	2	.193	5.647
	Greenhouse-Geisser	.386	1.857	.208	5.647
	Huynh-Feldt	.386	2.000	.193	5.647
	Lower-bound	.386	1.000	.386	5.647
Error(Attributes)	Sphericity Assumed	1.161	34	.034	
	Greenhouse-Geisser	1.161	31.575	.037	
	Huynh-Feldt	1.161	34.000	.034	
	Lower-bound	1.161	17.000	.068	
Visualizations * Datasets	Sphericity Assumed	.224	4	.056	1.975
	Greenhouse-Geisser	.224	3.519	.064	1.975
	Huynh-Feldt	.224	4.000	.056	1.975
	Lower-bound	.224	1.000	.224	1.975
Error (Visualizations*Datasets)	Sphericity Assumed	1.926	68	.028	
	Greenhouse-Geisser	1.926	59.817	.032	
	Huynh-Feldt	1.926	68.000	.028	
	Lower-bound	1.926	17.000	.113	
Visualizations * Attributes	Sphericity Assumed	.987	8	.123	3.857
	Greenhouse-Geisser	.987	4.613	.214	3.857

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
Visualizations	Sphericity Assumed	.000	.362	38.595
	Greenhouse-Geisser	.000	.362	26.221
	Huynh-Feldt	.000	.362	31.695
	Lower-bound	.006	.362	9.649
Error(Visualizations)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets	Sphericity Assumed	.008	.348	9.085
	Greenhouse-Geisser	.008	.348	9.085
	Huynh-Feldt	.008	.348	9.085
	Lower-bound	.008	.348	9.085
Error(Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Attributes	Sphericity Assumed	.008	.249	11.293
	Greenhouse-Geisser	.009	.249	10.488
	Huynh-Feldt	.008	.249	11.293
	Lower-bound	.030	.249	5.647
Error(Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Datasets	Sphericity Assumed	.108	.104	7.900
	Greenhouse-Geisser	.118	.104	6.949
	Huynh-Feldt	.108	.104	7.900
	Lower-bound	.178	.104	1.975
Error (Visualizations*Datasets)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Attributes	Sphericity Assumed	.000	.185	30.857
	Greenhouse-Geisser	.004	.185	17.791

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power ^a
Visualizations	Sphericity Assumed	.999
	Greenhouse-Geisser	.993
	Huynh-Feldt	.998
	Lower-bound	.833
Error(Visualizations)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets	Sphericity Assumed	.811
	Greenhouse-Geisser	.811
	Huynh-Feldt	.811
	Lower-bound	.811
Error(Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Attributes	Sphericity Assumed	.828
	Greenhouse-Geisser	.806
	Huynh-Feldt	.828
	Lower-bound	.611
Error(Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Datasets	Sphericity Assumed	.565
	Greenhouse-Geisser	.525
	Huynh-Feldt	.565
	Lower-bound	.264
Error (Visualizations*Datasets)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Attributes	Sphericity Assumed	.987
	Greenhouse-Geisser	.911

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
	Huynh-Feldt	.987	6.541	.151	3.857
	Lower-bound	.987	1.000	.987	3.857
Error (Visualizations*Attributes)	Sphericity Assumed	4.350	136	.032	
	Greenhouse-Geisser	4.350	78.414	.055	
	Huynh-Feldt	4.350	111.198	.039	
	Lower-bound	4.350	17.000	.256	
Datasets * Attributes	Sphericity Assumed	.365	2	.183	3.737
	Greenhouse-Geisser	.365	1.239	.295	3.737
	Huynh-Feldt	.365	1.288	.283	3.737
	Lower-bound	.365	1.000	.365	3.737
Error(Datasets*Attributes)	Sphericity Assumed	1.660	34	.049	
	Greenhouse-Geisser	1.660	21.065	.079	
	Huynh-Feldt	1.660	21.900	.076	
	Lower-bound	1.660	17.000	.098	
Visualizations * Datasets * Attributes	Sphericity Assumed	.418	8	.052	1.323
	Greenhouse-Geisser	.418	5.010	.083	1.323
	Huynh-Feldt	.418	7.355	.057	1.323
	Lower-bound	.418	1.000	.418	1.323
Error (Visualizations*Datasets*Att ributes)	Sphericity Assumed	5.372	136	.039	
	Greenhouse-Geisser	5.372	85.173	.063	
	Huynh-Feldt	5.372	125.032	.043	
	Lower-bound	5.372	17.000	.316	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.	Partial Eta Squared	Noncent. Parameter
	Huynh-Feldt	.001	.185	25.230
	Lower-bound	.066	.185	3.857
Error (Visualizations*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Datasets * Attributes	Sphericity Assumed	.034	.180	7.474
	Greenhouse-Geisser	.059	.180	4.631
	Huynh-Feldt	.057	.180	4.814
	Lower-bound	.070	.180	3.737
Error(Datasets*Attributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			
Visualizations * Datasets * Attributes	Sphericity Assumed	.237	.072	10.583
	Greenhouse-Geisser	.262	.072	6.628
	Huynh-Feldt	.242	.072	9.730
	Lower-bound	.266	.072	1.323
Error (Visualizations*Datasets*Att ributes)	Sphericity Assumed			
	Greenhouse-Geisser			
	Huynh-Feldt			
	Lower-bound			

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Observed Power ^a
	Huynh-Feldt	.970
	Lower-bound	.457
Error (Visualizations*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Datasets * Attributes	Sphericity Assumed	.644
	Greenhouse-Geisser	.500
	Huynh-Feldt	.511
	Lower-bound	.446
Error(Datasets*Attributes)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
Visualizations * Datasets * Attributes	Sphericity Assumed	.588
	Greenhouse-Geisser	.447
	Huynh-Feldt	.561
	Lower-bound	.192
Error (Visualizations*Datasets*Att ributes)	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			.455	1
	Quadratic			.216	1
	Cubic			.081	1
	Order 4			.850	1
Error(Visualizations)	Linear			.429	17
	Quadratic			.927	17
	Cubic			.563	17
	Order 4			.905	17
Datasets		Linear		.422	1
Error(Datasets)		Linear		.790	17
Attributes			Linear	.218	1
			Quadratic	.167	1
Error(Attributes)			Linear	.440	17
			Quadratic	.720	17
Visualizations * Datasets	Linear	Linear		.043	1
	Quadratic	Linear		.093	1
	Cubic	Linear		.075	1
	Order 4	Linear		.013	1
Error (Visualizations*Datasets)	Linear	Linear		.507	17
	Quadratic	Linear		.392	17
	Cubic	Linear		.594	17
	Order 4	Linear		.433	17
Visualizations * Attributes	Linear		Linear	.084	1
			Quadratic	.069	1
	Quadratic		Linear	.640	1
			Quadratic	.002	1
	Cubic		Linear	.004	1
			Quadratic	.006	1
	Order 4		Linear	.004	1
			Quadratic	.177	1
Error (Visualizations*Attributes)	Linear		Linear	.317	17
			Quadratic	.262	17
	Quadratic		Linear	.526	17
			Quadratic	.433	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Mean Square	F
Visualizations	Linear			.455	18.031
	Quadratic			.216	3.963
	Cubic			.081	2.457
	Order 4			.850	15.976
Error(Visualizations)	Linear			.025	
	Quadratic			.055	
	Cubic			.033	
	Order 4			.053	
Datasets		Linear		.422	9.085
Error(Datasets)		Linear		.046	
Attributes			Linear	.218	8.432
			Quadratic	.167	3.944
Error(Attributes)			Linear	.026	
			Quadratic	.042	
Visualizations * Datasets	Linear	Linear		.043	1.453
	Quadratic	Linear		.093	4.028
	Cubic	Linear		.075	2.133
	Order 4	Linear		.013	.514
Error (Visualizations*Datasets)	Linear	Linear		.030	
	Quadratic	Linear		.023	
	Cubic	Linear		.035	
	Order 4	Linear		.025	
Visualizations * Attributes	Linear		Linear	.084	4.517
			Quadratic	.069	4.496
	Quadratic		Linear	.640	20.671
			Quadratic	.002	.070
	Cubic		Linear	.004	.080
			Quadratic	.006	.185
	Order 4		Linear	.004	.101
			Quadratic	.177	5.123
Error (Visualizations*Attributes)	Linear		Linear	.019	
			Quadratic	.015	
	Quadratic		Linear	.031	
			Quadratic	.025	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Sig.	Partial Eta Squared
Visualizations	Linear			.001	.515
	Quadratic			.063	.189
	Cubic			.135	.126
	Order 4			.001	.484
Error(Visualizations)	Linear				
	Quadratic				
	Cubic				
	Order 4				
Datasets		Linear		.008	.348
Error(Datasets)		Linear			
Attributes			Linear	.010	.332
			Quadratic	.063	.188
Error(Attributes)			Linear		
			Quadratic		
Visualizations * Datasets	Linear	Linear		.245	.079
	Quadratic	Linear		.061	.192
	Cubic	Linear		.162	.111
	Order 4	Linear		.483	.029
Error (Visualizations*Datasets)	Linear	Linear			
	Quadratic	Linear			
	Cubic	Linear			
	Order 4	Linear			
Visualizations * Attributes	Linear		Linear	.049	.210
			Quadratic	.049	.209
	Quadratic		Linear	.000	.549
			Quadratic	.794	.004
	Cubic		Linear	.781	.005
			Quadratic	.673	.011
	Order 4		Linear	.754	.006
			Quadratic	.037	.232
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			18.031	.979
	Quadratic			3.963	.467
	Cubic			2.457	.316
	Order 4			15.976	.964
Error(Visualizations)	Linear				
	Quadratic				
	Cubic				
	Order 4				
Datasets		Linear		9.085	.811
Error(Datasets)		Linear			
Attributes			Linear	8.432	.781
			Quadratic	3.944	.466
Error(Attributes)			Linear		
			Quadratic		
Visualizations * Datasets	Linear	Linear		1.453	.207
	Quadratic	Linear		4.028	.473
	Cubic	Linear		2.133	.281
	Order 4	Linear		.514	.104
Error (Visualizations*Datasets)	Linear	Linear			
	Quadratic	Linear			
	Cubic	Linear			
	Order 4	Linear			
Visualizations * Attributes	Linear		Linear	4.517	.518
			Quadratic	4.496	.516
	Quadratic		Linear	20.671	.990
			Quadratic	.070	.057
	Cubic		Linear	.080	.058
			Quadratic	.185	.069
	Order 4		Linear	.101	.060
			Quadratic	5.123	.569
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	.911	17
			Quadratic	.592	17
	Order 4		Linear	.722	17
			Quadratic	.586	17
Datasets * Attributes		Linear	Linear	.364	1
			Quadratic	.001	1
Error(Datasets*Attributes)		Linear	Linear	.418	17
			Quadratic	1.242	17
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.097	1
			Quadratic	.062	1
	Quadratic	Linear	Linear	.040	1
			Quadratic	.129	1
	Cubic	Linear	Linear	.008	1
			Quadratic	.076	1
	Order 4	Linear	Linear	.005	1
			Quadratic	5.839E-6	1
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear	.718	17
			Quadratic	.535	17
	Quadratic	Linear	Linear	.408	17
			Quadratic	.491	17
	Cubic	Linear	Linear	.914	17
			Quadratic	.643	17
	Order 4	Linear	Linear	.413	17
			Quadratic	1.250	17

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Visualizations	Datasets	Attributes	Mean Square	F
	Cubic		Linear	.054	
			Quadratic	.035	
	Order 4		Linear	.042	
			Quadratic	.034	
Datasets * Attributes		Linear	Linear	.364	14.794
			Quadratic	.001	.015
Error(Datasets*Attributes)		Linear	Linear	.025	
			Quadratic	.073	
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.097	2.295
			Quadratic	.062	1.971
	Quadratic	Linear	Linear	.040	1.685
			Quadratic	.129	4.461
	Cubic	Linear	Linear	.008	.147
			Quadratic	.076	2.023
	Order 4	Linear	Linear	.005	.225
			Quadratic	5.839E-6	.000
Error (Visualizations*Datasets*Attributes)	Linear	Linear	Linear	.042	
			Quadratic	.031	
	Quadratic	Linear	Linear	.024	
			Quadratic	.029	
	Cubic	Linear	Linear	.054	
			Quadratic	.038	
	Order 4	Linear	Linear	.024	
			Quadratic	.074	

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	.001	.465
			Quadratic	.903	.001
Error(Datasets*Attributes)		Linear	Linear		
			Quadratic		
Visualizations * Datasets * Attributes	Linear	Linear	Linear	.148	.119
			Quadratic	.178	.104
	Quadratic	Linear	Linear	.212	.090
			Quadratic	.050	.208
	Cubic	Linear	Linear	.706	.009
			Quadratic	.173	.106
	Order 4	Linear	Linear	.641	.013
			Quadratic	.993	.000
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	14.794	.952
			Quadratic	.015	.052
Error(Datasets*Attributes)		Linear	Linear		
			Quadratic		
Visualizations * Datasets * Attributes	Linear	Linear	Linear	2.295	.298
			Quadratic	1.971	.263
	Quadratic	Linear	Linear	1.685	.232
			Quadratic	4.461	.513
	Cubic	Linear	Linear	.147	.065
			Quadratic	2.023	.269
	Order 4	Linear	Linear	.225	.073
			Quadratic	.000	.050
Error (Visualizations*Datasets*Att ributes)	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	832.064	1	832.064	2284.155	.000	.993
Error	6.193	17	.364			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Noncent. Parameter	Observed Power ^a
Intercept	2284.155	1.000
Error		

a. Computed using alpha = .05

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
1.241	.026	1.187	1.296

2. Visualizations

Estimates

Measure: MEASURE_1

Visualizations	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	1.257	.032	1.188	1.325
2	1.299	.027	1.241	1.356
3	1.202	.041	1.116	1.287
4	1.293	.026	1.237	1.348
5	1.157	.028	1.098	1.216

Pairwise Comparisons

Measure: MEASURE_1

(I) Visualizations	(J) Visualizations	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence b...
					Lower Bound
1	2	-.042	.028	1.000	-.134
	3	.055	.033	1.000	-.050
	4	-.036	.018	.607	-.094
	5	.100 [*]	.023	.006	.024
2	1	.042	.028	1.000	-.049
	3	.097	.032	.073	-.006
	4	.006	.023	1.000	-.068
	5	.142 [*]	.025	.000	.062
3	1	-.055	.033	1.000	-.160
	2	-.097	.032	.073	-.200
	4	-.091	.033	.127	-.196
	5	.045	.037	1.000	-.076
4	1	.036	.018	.607	-.022
	2	-.006	.023	1.000	-.081
	3	.091	.033	.127	-.014
	5	.135 [*]	.018	.000	.077
5	1	-.100 [*]	.023	.006	-.175
	2	-.142 [*]	.025	.000	-.221
	3	-.045	.037	1.000	-.165
	4	-.135 [*]	.018	.000	-.194

Pairwise Comparisons

Measure: MEASURE_1

		95% Confidence Interval for ... ^b
(I) Visualizations	(J) Visualizations	Upper Bound
1	2	.049
	3	.160
	4	.022
	5	.175
2	1	.134
	3	.200
	4	.081
	5	.221
3	1	.050
	2	.006
	4	.014
	5	.165
4	1	.094
	2	.068
	3	.196
	5	.194
5	1	-.024
	2	-.062
	3	.076
	4	-.077

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	.827	16.709 ^a	4.000	14.000	.000	.827
Wilks' lambda	.173	16.709 ^a	4.000	14.000	.000	.827
Hotelling's trace	4.774	16.709 ^a	4.000	14.000	.000	.827
Roy's largest root	4.774	16.709 ^a	4.000	14.000	.000	.827

Multivariate Tests

	Noncent. Parameter	Observed Power ^b
Pillai's trace	66.837	1.000
Wilks' lambda	66.837	1.000
Hotelling's trace	66.837	1.000
Roy's largest root	66.837	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	1.269	.028	1.210	1.329
2	1.213	.027	1.156	1.270

Pairwise Comparisons

Measure: MEASURE_1

(I) Datasets	(J) Datasets	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	.056 [*]	.019	.008	.017	.095
2	1	-.056 [*]	.019	.008	-.095	-.017

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	.348	9.085 ^a	1.000	17.000	.008	.348
Wilks' lambda	.652	9.085 ^a	1.000	17.000	.008	.348
Hotelling's trace	.534	9.085 ^a	1.000	17.000	.008	.348
Roy's largest root	.534	9.085 ^a	1.000	17.000	.008	.348

Multivariate Tests

	Noncent. Parameter	Observed Power ^b
Pillai's trace	9.085	.811
Wilks' lambda	9.085	.811
Hotelling's trace	9.085	.811
Roy's largest root	9.085	.811

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	1.278	.028	1.218	1.338
2	1.216	.029	1.156	1.277
3	1.229	.028	1.170	1.288

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	.062 [*]	.019	.017	.010	.114
	3	.049 [*]	.017	.030	.004	.094
2	1	-.062 [*]	.019	.017	-.114	-.010
	3	-.013	.022	1.000	-.070	.045
3	1	-.049 [*]	.017	.030	-.094	-.004
	2	.013	.022	1.000	-.045	.070

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	.457	6.720 ^a	2.000	16.000	.008	.457
Wilks' lambda	.543	6.720 ^a	2.000	16.000	.008	.457
Hotelling's trace	.840	6.720 ^a	2.000	16.000	.008	.457
Roy's largest root	.840	6.720 ^a	2.000	16.000	.008	.457

Multivariate Tests

	Noncent. Parameter	Observed Power ^b
Pillai's trace	13.439	.855
Wilks' lambda	13.439	.855
Hotelling's trace	13.439	.855
Roy's largest root	13.439	.855

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	1.303	.031	1.239	1.368
	2	1.210	.041	1.122	1.297
2	1	1.347	.037	1.270	1.425
	2	1.251	.025	1.198	1.303
3	1	1.206	.050	1.100	1.312
	2	1.197	.040	1.112	1.282
4	1	1.295	.032	1.227	1.363
	2	1.290	.030	1.226	1.354
5	1	1.195	.031	1.129	1.261
	2	1.119	.033	1.050	1.188

6. Visualizations * Attributes

Measure: MEASURE_1

Visualizations	Attributes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.364	.045	1.269	1.460
	2	1.241	.039	1.158	1.324
	3	1.164	.038	1.085	1.244
2	1	1.289	.047	1.191	1.388
	2	1.321	.042	1.234	1.409
	3	1.286	.042	1.197	1.375
3	1	1.213	.036	1.138	1.288
	2	1.139	.038	1.058	1.220
	3	1.253	.058	1.130	1.376
4	1	1.289	.031	1.225	1.354
	2	1.278	.038	1.197	1.359
	3	1.310	.035	1.236	1.384
5	1	1.236	.040	1.151	1.321
	2	1.103	.031	1.038	1.168
	3	1.132	.027	1.075	1.189

7. Datasets * Attributes

Measure: MEASURE_1

Datasets	Attributes	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	1.276	.033	1.205	1.346
	2	1.242	.039	1.161	1.324
	3	1.290	.030	1.226	1.354
2	1	1.281	.035	1.207	1.356
	2	1.191	.028	1.132	1.249
	3	1.168	.029	1.107	1.230