GLM Offset1 Offset2 Offset3 Offset4 Offset5

/WSFACTOR=Offset 5 Polynomial

/MEASURE=Response

/METHOD=SSTYPE(3)

/PLOT=PROFILE(Offset)

/EMMEANS=TABLES(Offset) COMPARE ADJ(BONFERRONI)

/PRINT=DESCRIPTIVE ETASQ

/CRITERIA=ALPHA(.05)

/WSDESIGN=Offset.

General Linear Model

Notes

| Output Created | 14-NOV-2018 14:35:25 | |
|------------------------|-----------------------------------|---|
| Comments | | |
| Input | Active Dataset | DataSet1 |
| | Filter | <none></none> |
| | Weight | <none></none> |
| | Split File | <none></none> |
| | N of Rows in Working Data File | 12 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics are based on all cases with valid data for all variables in the model. |
| Syntax | | GLM Offset1 Offset2 Offset3 Offset4 Offset5 /WSFACTOR=Offset 5 Polynomial /MEASURE=Response /METHOD=SSTYPE(3) /PLOT=PROFILE(Offset) /EMMEANS=TABLES (Offset) COMPARE ADJ (BONFERRONI) /PRINT=DESCRIPTIVE ETASQ /CRITERIA=ALPHA(.05) /WSDESIGN=Offset. |
| Resources | Processor Time | 00:00:01.33 |
| | Elapsed Time | 00:00:01.01 |

[DataSet1]

Within-Subjects Factors

Measure: Response

Dependent Variable

1 Offset1
2 Offset2
3 Offset3
4 Offset4
5 Offset5

Descriptive Statistics

| | Mean | Std. Deviation | N |
|---------|--------|----------------|----|
| Offset1 | 2.0208 | .31727 | 12 |
| Offset2 | 2.1500 | .36056 | 12 |
| Offset3 | 2.2542 | .32084 | 12 |
| Offset4 | 2.4042 | .25802 | 12 |
| Offset5 | 2.8667 | .45042 | 12 |

Multivariate Tests^a

| Effect | | Value | F | Hypothesis df | Error df | Sig. |
|--------|--------------------|-------|--------------------|---------------|----------|------|
| Offset | Pillai's Trace | .738 | 5.638 ^b | 4.000 | 8.000 | .019 |
| | Wilks' Lambda | .262 | 5.638 ^b | 4.000 | 8.000 | .019 |
| | Hotelling's Trace | 2.819 | 5.638 ^b | 4.000 | 8.000 | .019 |
| | Roy's Largest Root | 2.819 | 5.638 ^b | 4.000 | 8.000 | .019 |

Multivariate Tests^a

| Effect | | Partial Eta Squared |
|--------|--------------------|------------------------|
| Offset | Pillai's Trace | .738 |
| | Wilks' Lambda | .738 |
| | Hotelling's Trace | .738 |
| | Roy's Largest Root | .738 |

a. Design: Intercept

Within Subjects Design: Offset

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: Response

| | | | | | Epsilon ^b |
|------------------------|-------------|------------------------|----|------|------------------------|
| Within Subjects Effect | Mauchly's W | Approx. Chi- Square | df | Sig. | Greenhouse- Geisser |
| Offset | .142 | 18.370 | 9 | .033 | .479 |

Mauchly's Test of Sphericity^a

Measure: Response

Within Subjects Effect Huynh-Feldt Lower-bound

Offset .578 .250

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: Offset

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: Response

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---------------|--------------------|----------------------------|--------|-------------|--------|------|
| Offset | Sphericity Assumed | 5.122 | 4 | 1.280 | 12.304 | .000 |
| | Greenhouse-Geisser | 5.122 | 1.918 | 2.671 | 12.304 | .000 |
| | Huynh-Feldt | 5.122 | 2.314 | 2.214 | 12.304 | .000 |
| | Lower-bound | 5.122 | 1.000 | 5.122 | 12.304 | .005 |
| Error(Offset) | Sphericity Assumed | 4.579 | 44 | .104 | | |
| | Greenhouse-Geisser | 4.579 | 21.095 | .217 | | |
| | Huynh-Feldt | 4.579 | 25.450 | .180 | | |
| | Lower-bound | 4.579 | 11.000 | .416 | | |

Tests of Within-Subjects Effects

Measure: Response

| Source | | Partial Eta Squared |
|---------------|--------------------|------------------------|
| Offset | Sphericity Assumed | .528 |
| | Greenhouse-Geisser | .528 |
| | Huynh-Feldt | .528 |
| | Lower-bound | .528 |
| Error(Offset) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: Response

| Source | Offset | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---------------|-----------|-------------------------|----|-------------|--------|------|
| Offset | Linear | 4.544 | 1 | 4.544 | 18.637 | .001 |
| | Quadratic | .435 | 1 | .435 | 4.898 | .049 |
| | Cubic | .137 | 1 | .137 | 4.765 | .052 |
| | Order 4 | .007 | 1 | .007 | .120 | .736 |
| Error(Offset) | Linear | 2.682 | 11 | .244 | | |
| | Quadratic | .977 | 11 | .089 | | |
| | Cubic | .316 | 11 | .029 | | |
| | Order 4 | .605 | 11 | .055 | | |

Tests of Within-Subjects Contrasts

Measure: Response

| Source | Offset | Partial Eta Squared |
|---------------|-----------|------------------------|
| Offset | Linear | .629 |
| | Quadratic | .308 |
| | Cubic | .302 |
| | Order 4 | .011 |
| Error(Offset) | Linear | |
| | Quadratic | |
| | Cubic | |
| | Order 4 | |

Tests of Between-Subjects Effects

Measure: Response

Transformed Variable: Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|-----------|----------------------------|----|-------------|----------|------|------------------------|
| Intercept | 328.302 | 1 | 328.302 | 1757.798 | .000 | .994 |
| Error | 2.054 | 11 | .187 | | | |

Estimated Marginal Means

Offset

Estimates

Measure: Response

| | | | 95% Confidence Interval | | |
|--------|-------|------------|-------------------------|-------------|--|
| Offset | Mean | Std. Error | Lower Bound | Upper Bound | |
| 1 | 2.021 | .092 | 1.819 | 2.222 | |
| 2 | 2.150 | .104 | 1.921 | 2.379 | |
| 3 | 2.254 | .093 | 2.050 | 2.458 | |
| 4 | 2.404 | .074 | 2.240 | 2.568 | |
| 5 | 2.867 | .130 | 2.580 | 3.153 | |

Pairwise Comparisons

Measure: Response

| | | Maari | | | | nce Interval for rence ^b |
|------------|------------|--------------------------|------------|-------------------|-------------|--|
| (I) Offset | (J) Offset | Mean Difference (I-J) | Std. Error | Sig. ^b | Lower Bound | Upper Bound |
| 1 | 2 | 129 | .080 | 1.000 | 410 | .152 |
| | 3 | 233 | .111 | .587 | 620 | .154 |
| | 4 | 383 [*] | .106 | .042 | 756 | 011 |
| | 5 | 846 [*] | .178 | .006 | -1.469 | 222 |
| 2 | 1 | .129 | .080 | 1.000 | 152 | .410 |
| | 3 | 104 | .118 | 1.000 | 518 | .310 |
| | 4 | 254 | .117 | .520 | 662 | .154 |
| | 5 | 717 [*] | .205 | .049 | -1.432 | 002 |
| 3 | 1 | .233 | .111 | .587 | 154 | .620 |
| | 2 | .104 | .118 | 1.000 | 310 | .518 |
| | 4 | 150 | .074 | .688 | 410 | .110 |
| | 5 | 612 [*] | .145 | .014 | -1.120 | 105 |
| 4 | 1 | .383* | .106 | .042 | .011 | .756 |
| | 2 | .254 | .117 | .520 | 154 | .662 |
| | 3 | .150 | .074 | .688 | 110 | .410 |
| | 5 | 462 [*] | .125 | .034 | 898 | 027 |
| 5 | 1 | .846 [*] | .178 | .006 | .222 | 1.469 |
| | 2 | .717 [*] | .205 | .049 | .002 | 1.432 |
| | 3 | .612 [*] | .145 | .014 | .105 | 1.120 |
| | 4 | .462 [*] | .125 | .034 | .027 | .898 |

Based on estimated marginal means

 $^{^{\}star}.$ 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 | .738 | 5.638 ^a | 4.000 | 8.000 | .019 | .738 |
| Wilks' lambda | .262 | 5.638 ^a | 4.000 | 8.000 | .019 | .738 |
| Hotelling's trace | 2.819 | 5.638 ^a | 4.000 | 8.000 | .019 | .738 |
| Roy's largest root | 2.819 | 5.638 ^a | 4.000 | 8.000 | .019 | .738 |

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

a. Exact statistic

Profile Plots



