General Linear Model

E:\clients\Anxiety.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

Time Dependent Variable

1 anxiety_week _before

2 anxiety_day_before

3 anxiety_after_exam

Descriptive Statistics

| | Mean | Std. Deviation | N |
|------------------------------------|---------|----------------|----|
| STAI-State: 1 week before exam | 38.2200 | 1.98247 | 50 |
| STAI-State: 1 day before exam | 60.3800 | 1.99888 | 50 |
| STAI-State: Immediately after exam | 41.0000 | 1.72615 | 50 |

Multivariate Tests^a

| Effect | | Value | F | Hypothesis df | Error df | Sig. |
|--------|--------------------|---------|-----------------------|---------------|----------|------|
| Time | Pillai's Trace | .990 | 2434.446 ^b | 2.000 | 48.000 | .000 |
| | Wilks' Lambda | .010 | 2434.446 ^b | 2.000 | 48.000 | .000 |
| | Hotelling's Trace | 101.435 | 2434.446 ^b | 2.000 | 48.000 | .000 |
| | Roy's Largest Root | 101.435 | 2434.446 ^b | 2.000 | 48.000 | .000 |

Multivariate Tests^a

| Effect | | Partial Eta Squared |
|--------|--------------------|------------------------|
| Time | Pillai's Trace | .990 |
| | Wilks' Lambda | .990 |
| | Hotelling's Trace | .990 |
| | Roy's Largest Root | .990 |

a. Design: Intercept

Within Subjects Design: Time

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

| | | | | | Epsilon ^b |
|------------------------|-------------|------------------------|----|------|------------------------|
| Within Subjects Effect | Mauchly's W | Approx. Chi- Square | df | Sig. | Greenhouse- Geisser |
| Time | .574 | 26.674 | 2 | .000 | .701 |

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Epsilon^b

| Within Subjects Effect | Huynh-Feldt | Lower-bound |
|------------------------|-------------|-------------|
| Time | .715 | .500 |

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: Time

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 | Sig. |
|-------------|--------------------|----------------------------|--------|-------------|----------|------|
| Time | Sphericity Assumed | 14572.973 | 2 | 7286.487 | 3973.857 | .000 |
| | Greenhouse-Geisser | 14572.973 | 1.402 | 10392.983 | 3973.857 | .000 |
| | Huynh-Feldt | 14572.973 | 1.431 | 10184.186 | 3973.857 | .000 |
| | Lower-bound | 14572.973 | 1.000 | 14572.973 | 3973.857 | .000 |
| Error(Time) | Sphericity Assumed | 179.693 | 98 | 1.834 | | |
| | Greenhouse-Geisser | 179.693 | 68.707 | 2.615 | | |
| | Huynh-Feldt | 179.693 | 70.116 | 2.563 | | |
| | Lower-bound | 179.693 | 49.000 | 3.667 | | |

Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Partial Eta Squared |
|-------------|--------------------|------------------------|
| Time | Sphericity Assumed | .988 |
| | Greenhouse-Geisser | .988 |
| | Huynh-Feldt | .988 |
| | Lower-bound | .988 |
| Error(Time) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | Time | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-------------|-----------|----------------------------|----|-------------|----------|------|
| Time | Linear | 193.210 | 1 | 193.210 | 260.879 | .000 |
| | Quadratic | 14379.763 | 1 | 14379.763 | 4913.473 | .000 |
| Error(Time) | Linear | 36.290 | 49 | .741 | | |
| | Quadratic | 143.403 | 49 | 2.927 | | |

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | Time | Partial Eta Squared |
|-------------|-----------|------------------------|
| Time | Linear | .842 |
| | Quadratic | .990 |
| Error(Time) | Linear | |
| | Quadratic | |

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 | 324802.667 | 1 | 324802.667 | 44874.053 | .000 | .999 |
| Error | 354.667 | 49 | 7.238 | | | |

Estimated Marginal Means

Time

Estimates

Measure: MEASURE_1

| | | | 95% Confidence Interval | | |
|------|--------|------------|-------------------------|-------------|--|
| Time | Mean | Std. Error | Lower Bound | Upper Bound | |
| 1 | 38.220 | .280 | 37.657 | 38.783 | |
| 2 | 60.380 | .283 | 59.812 | 60.948 | |
| 3 | 41.000 | .244 | 40.509 | 41.491 | |

Pairwise Comparisons

Measure: MEASURE_1

| | | | | | 95% Confidence Interval for Difference ^b | |
|----------|----------|--------------------------|------------|-------------------|--|-------------|
| (I) Time | (J) Time | Mean Difference (I-J) | Std. Error | Sig. ^b | Lower Bound | Upper Bound |
| 1 | 2 | -22.160 [*] | .335 | .000 | -22.990 | -21.330 |
| | 3 | -2.780 [*] | .172 | .000 | -3.207 | -2.353 |
| 2 | 1 | 22.160 [*] | .335 | .000 | 21.330 | 22.990 |
| | 3 | 19.380 [*] | .280 | .000 | 18.686 | 20.074 |
| 3 | 1 | 2.780* | .172 | .000 | 2.353 | 3.207 |
| | 2 | -19.380 [*] | .280 | .000 | -20.074 | -18.686 |

Based on estimated marginal means

b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

| | Value | F | Hypothesis df | Error df | Sig. | Partial Eta Squared |
|--------------------|---------|-----------------------|---------------|----------|------|------------------------|
| Pillai's trace | .990 | 2434.446 ^a | 2.000 | 48.000 | .000 | .990 |
| Wilks' lambda | .010 | 2434.446 ^a | 2.000 | 48.000 | .000 | .990 |
| Hotelling's trace | 101.435 | 2434.446 ^a | 2.000 | 48.000 | .000 | .990 |
| Roy's largest root | 101.435 | 2434.446 ^a | 2.000 | 48.000 | .000 | .990 |

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

a. Exact statistic

Profile Plots

^{*.} The mean difference is significant at the .05 level.

Estimated Marginal Means of MEASURE_1

