# Oneway

### Notes

| Output Created         |                                | 28-FEB-2022 22:53:46  |
|------------------------|--------------------------------|---|
| Comments               |                                |   |
| Input                  | Data                           | /Users/benjamin/Deskto<br>p/AP Research/21-22-<br>PAS-AP-<br>Research/Experiment<br>4/E4-Raw/E4-CAM.csv                               |
|                        | Active Dataset                 | DataSet12   |
|                        | Filter                         | <none></none>   |
|                        | Weight                         | <none></none>   |
|                        | Split File                     | <none></none>   |
|                        | N of Rows in Working Data File | 20  |
| Missing Value Handling | Definition of Missing          | User-defined missing values are treated as missing.   |
|                        | Cases Used                     | Statistics for each analysis are based on cases with no missing data for any variable in the analysis.                                |
| Syntax                 |                                | ONEWAY Difference BY Scale /ES=OVERALL /STATISTICS HOMOGENEITY /MISSING ANALYSIS /CRITERIA=CILEVEL (0.95) /POSTHOC=TUKEY ALPHA(0.05). |
| Resources              | Processor Time                 | 00:00:00.02   |
|                        | Elapsed Time                   | 00:00:00.00   |

# Tests of Homogeneity of Variances

|            |                                      | Levene Statistic | df1 | df2    | Sig. |
|------------|--------------------------------------|------------------|-----|--------|------|
| Difference | Based on Mean                        | 4.497            | 3   | 16     | .018 |
|            | Based on Median                      | 1.361            | 3   | 16     | .290 |
|            | Based on Median and with adjusted df | 1.361            | 3   | 11.557 | .303 |
|            | Based on trimmed mean                | 4.145            | 3   | 16     | .024 |

#### **ANOVA**

#### Difference

|                | Sum of Squares | df | Mean Square | F        | Sig.  |
|----------------|----------------|----|-------------|----------|-------|
| Between Groups | .002           | 3  | .001        | 5144.748 | <.001 |
| Within Groups  | .000           | 16 | .000        |          |       |
| Total          | .002           | 19 |             |          |       |

# ANOVA Effect Sizes<sup>a</sup>

|            |                                 |                | 95% Confidence Interval |       |
|------------|---------------------------------|----------------|-------------------------|-------|
|            |                                 | Point Estimate | Lower                   | Upper |
| Difference | Eta-squared                     | .999           | .997                    | .999  |
|            | Epsilon-squared                 | .999           | .996                    | .999  |
|            | Omega-squared Fixed-<br>effect  | .999           | .996                    | .999  |
|            | Omega-squared Random-<br>effect | .996           | .989                    | .997  |

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

#### **Post Hoc Tests**

### **Multiple Comparisons**

Dependent Variable: Difference

Tukey HSD

|           |           | Mean                 |            |       | 95% Confidence Interval |             |
|-----------|-----------|----------------------|------------|-------|-------------------------|-------------|
| (I) Scale | (J) Scale | Difference (I-J)     | Std. Error | Sig.  | Lower Bound             | Upper Bound |
| 5         | 10        | .0138200*            | .0002313   | <.001 | .013158                 | .014482     |
|           | 15        | .0196400*            | .0002313   | <.001 | .018978                 | .020302     |
|           | 20        | .0278600 *           | .0002313   | <.001 | .027198                 | .028522     |
| 10        | 5         | 0138200 <sup>*</sup> | .0002313   | <.001 | 014482                  | 013158      |
|           | 15        | .0058200*            | .0002313   | <.001 | .005158                 | .006482     |
|           | 20        | .0140400*            | .0002313   | <.001 | .013378                 | .014702     |
| 15        | 5         | 0196400 <sup>*</sup> | .0002313   | <.001 | 020302                  | 018978      |
|           | 10        | 0058200 <sup>*</sup> | .0002313   | <.001 | 006482                  | 005158      |
|           | 20        | .0082200*            | .0002313   | <.001 | .007558                 | .008882     |
| 20        | 5         | 0278600 <sup>*</sup> | .0002313   | <.001 | 028522                  | 027198      |
|           | 10        | 0140400 <sup>*</sup> | .0002313   | <.001 | 014702                  | 013378      |
|           | 15        | 0082200*             | .0002313   | <.001 | 008882                  | 007558      |

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

# **Homogeneous Subsets**

### Difference

Tukey HSD<sup>a</sup>

|       |   | Subset for alpha = 0.05 |        |        |        |  |
|-------|---|-------------------------|--------|--------|--------|--|
| Scale | N | 1                       | 2      | 3      | 4      |  |
| 20    | 5 | 029080                  |        |        |        |  |
| 15    | 5 |                         | 020860 |        |        |  |
| 10    | 5 |                         |        | 015040 |        |  |
| 5     | 5 |                         |        |        | 001220 |  |
| Sig.  |   | 1.000                   | 1.000  | 1.000  | 1.000  |  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.