```
UNIANOVA Bamboo BY Location Gender
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Location(BONFERRONI)
  /PRINT=DESCRIPTIVE HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /DESIGN=Location Gender Location*Gender.
```

# Univariate Analysis of Variance

### Between-Subjects Factors

| | | Value Label | N |
|---|---|---|---|
| Location | 1.00 | China | 5 |
| | 2.00 | San Diego | 5 |
| | 3.00 | Wash DC | 5 |
| | 4.00 | Atlanta | 5 |
| Gender | 1.00 | male | 10 |
| | 2.00 | female | 10 |

### Descriptive Statistics

Dependent Variable: Bamboo

| Location | Gender | Mean | Std. Deviation | N |
|---|---|---|---|---|
| China | male | 6.0000 | . | 1 |
| | female | 6.5000 | 2.38048 | 4 |
| | Total | 6.4000 | 2.07364 | 5 |
| San Diego | male | 9.6667 | .57735 | 3 |
| | female | 10.0000 | 2.82843 | 2 |
| | Total | 9.8000 | 1.48324 | 5 |
| Wash DC | male | 11.2500 | 2.21736 | 4 |
| | female | 14.0000 | . | 1 |
| | Total | 11.8000 | 2.28035 | 5 |
| Atlanta | male | 10.0000 | .00000 | 2 |
| | female | 8.6667 | 3.05505 | 3 |
| | Total | 9.2000 | 2.28035 | 5 |
| Total | male | 10.0000 | 2.05480 | 10 |
| | female | 8.6000 | 3.23866 | 10 |
| | Total | 9.3000 | 2.73573 | 20 |

### Levene's Test of Equality of Error Variances[a]

Dependent Variable: Bamboo

| F | df1 | df2 | Sig. |
|---|---|---|---|
| 3.511 | 7 | 12 | .027 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Location + Gender + Location * Gender

### Tests of Between-Subjects Effects

Dependent Variable: Bamboo

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Corrected Model | 83.117[a] | 7 | 11.874 | 2.412 | .086 |
| Intercept | 1389.282 | 1 | 1389.282 | 282.167 | .000 |
| Location | 65.707 | 3 | 21.902 | 4.448 | .025 |
| Gender | 1.215 | 1 | 1.215 | .247 | .628 |
| Location * Gender | 8.027 | 3 | 2.676 | .543 | .662 |
| Error | 59.083 | 12 | 4.924 | | |
| Total | 1872.000 | 20 | | | |
| Corrected Total | 142.200 | 19 | | | |

a. R Squared = .585 (Adjusted R Squared = .342)

## Post Hoc Tests

## Location

## Multiple Comparisons

Dependent Variable: Bamboo

Bonferroni

| (I) Location | (J) Location | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| China | San Diego | -3.4000 | 1.40337 | .193 | -7.8244 | 1.0244 |
| | Wash DC | -5.4000* | 1.40337 | .014 | -9.8244 | -.9756 |
| | Atlanta | -2.8000 | 1.40337 | .415 | -7.2244 | 1.6244 |
| San Diego | China | 3.4000 | 1.40337 | .193 | -1.0244 | 7.8244 |
| | Wash DC | -2.0000 | 1.40337 | 1.000 | -6.4244 | 2.4244 |
| | Atlanta | .6000 | 1.40337 | 1.000 | -3.8244 | 5.0244 |
| Wash DC | China | 5.4000* | 1.40337 | .014 | .9756 | 9.8244 |
| | San Diego | 2.0000 | 1.40337 | 1.000 | -2.4244 | 6.4244 |
| | Atlanta | 2.6000 | 1.40337 | .532 | -1.8244 | 7.0244 |
| Atlanta | China | 2.8000 | 1.40337 | .415 | -1.6244 | 7.2244 |
| | San Diego | -.6000 | 1.40337 | 1.000 | -5.0244 | 3.8244 |
| | Wash DC | -2.6000 | 1.40337 | .532 | -7.0244 | 1.8244 |

Based on observed means.

The error term is Mean Square(Error) = 4.924.

*. The mean difference is significant at the .05 level.