

Tonight we analyze two sets of data: oneway.sav and twoway.sav

1. confirm the results with oneway.sav
2. compare two sets of mean with twoway.sav

1. Run GLM with oneway.sav data set: Complete the table below

Dependent Variable:DV

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Corrected Model | 62.308 ^a | 2 | 31.154 | 12.981 | .002 |
| Intercept | 645.333 | 1 | 645.333 | 268.889 | .000 |
| IV | | | | | |
| Error | | | | | |
| Total | 871.000 | 13 | | | |
| Corrected Total | | | | | |

2. Conduct Two-Way ANOVA with twoway.sav data set and complete tables

- a. Check the data set first:
- b. ANOVA table
- c. Compare two sets of means of retention by gender

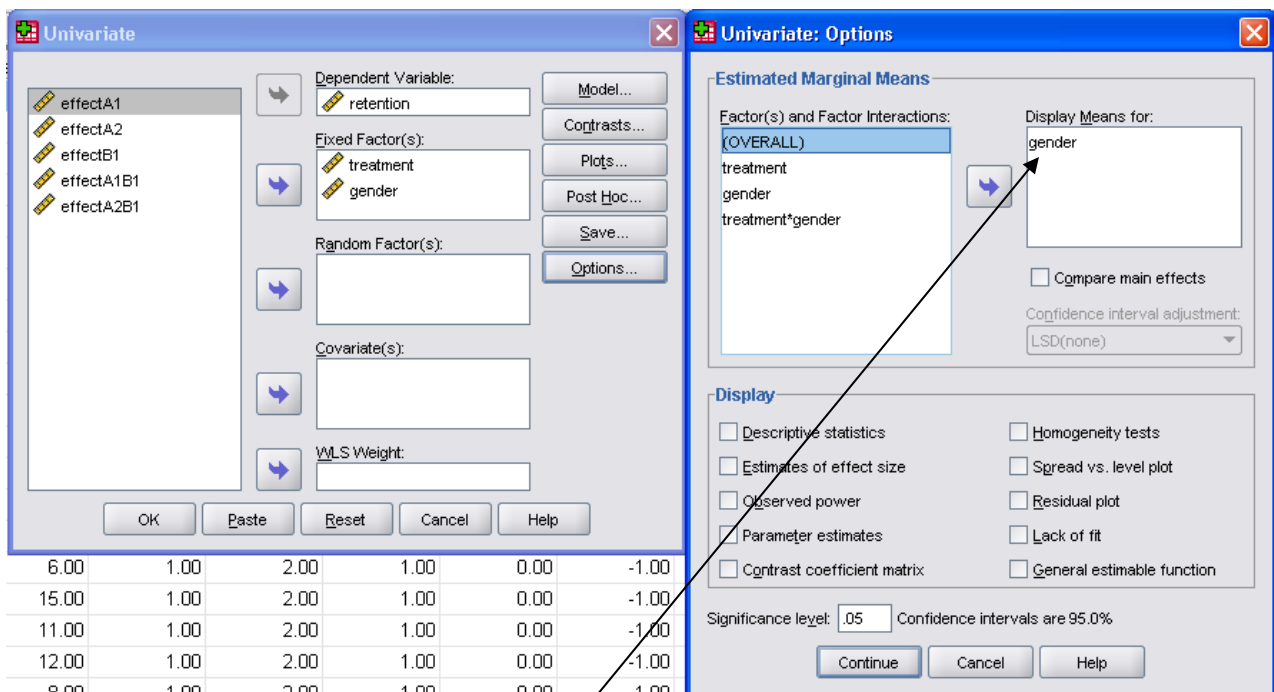


Table 1. Data Checking

| | | Value Label | N |
|-----------|---|-------------|----|
| treatment | 1 | | 12 |
| | 2 | | 15 |
| | 3 | | 10 |
| gender | 1 | Male | |
| | 2 | Female | |

Table 2. ANOVA table

Dependent Variable: retention

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------------------|-------------------------|----|-------------|---------|------|
| Corrected Model | 824.975 ^a | 5 | 164.995 | 14.478 | .000 |
| Intercept | 6740.110 | 1 | 6740.110 | 591.413 | .000 |
| treatment | | | | | .000 |
| gender | | | | | |
| treatment * gender | | | | | |
| Error | | | | | |
| Total | 9265.000 | 37 | | | |
| Corrected Total | 1178.270 | 36 | | | |

Table 3. Means Comparison

| Least Squares Means | 95% Confidence Interval | | | | N | Minimum | Maximum | Mean | Std. Deviation |
|---------------------|-------------------------|------------|-------------|------------------|----|---------|---------|------|----------------|
| | Mean | Std. Error | Lower Bound | Upper Bound | | | | | |
| Male | | .941 | 13.169 | 17.009 retention | 14 | 8.00 | 22.00 | | 4.30436 |
| Female | | .709 | 12.126 | 15.017 retention | 23 | 5.00 | 26.00 | | 6.45936 |

