# Social Science Statistics

## Social Science Statistics

**1**: Copy and paste in your data. Consider "Treatment 1," "Treatment 2," "Treatment 3," etc. your three (or four) categories.

| Treatment 1 | Treatment 2 | Treatment 3 | Treatment 4 | Treatment 5 |
|---|---|---|---|---|
| | | | | |

**2**: Click "**Calculate**" (not shown here).

### Summary of Data

| | | Treatments | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | Total |
| These are the **Ns** of your categories. | N | 50 | 50 | 50 | | | 150 |
| | $\sum X$ | 252647 | 260536 | 252421 | | | 765604 |
| These are the **Means** of your categories. | Mean | 5052.94 | 5210.72 | 5048.42 | | | 5104.027 |
| | $\sum X^2$ | 1342820859 | 1410382980 | 1320377203 | | | 4073581042 |
| These are the **Standard Deviations** of your categories. | Std.Dev. | 1162.4282 | 1038.0794 | 969.4305 | | | 1055.2452 |

This is the variance in your dependent variable that is **explained** by your independent variable.

This is your **F-ratio**.

| Source | SS | | | |
|---|---|---|---|---|
| Between-treatments | 854270.8133 | 2 | 427135.4067 | F = 0.38039 |
| Within-treatments | 165063539.08 | 147 | 1122881.2182 | |
| Total | 165917809.8933 | 149 | | |

This is the variance in your dependent variable that is **unexplained** by your independent variable.

This sentence contains your **F-ratio** and **p-value**.

The *f*-ratio value is 0.38039. The *p*-value is .684264. The result is *not* significant at *p* < .05.