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Homework 4 – ANOVA

A two way Analysis of variation as we know deals with two independent variables, often the subsets of what we're looking at as a whole. Two examples of this would be the in text example of the relationship between Corn and fertilizer, but more specifically, different types of corn as well as different fertilizers. In this homework assignment a similar situation was provided with data concerning the effects of alcohol on perceived attractiveness of another person. In both cases, the overall picture can be generalized in either a positive or negative yes or just no effect, using the two, possibly different, means joined into one.

The importance of the interaction effects can easily be seen when the two variables are graphed on the same plot. Two completely opposite results may sometimes create a misleading stable looking median overall, and may go unnoticed. In the homework example the female plot is fairly even across all amounts of alcohol, while the male plot has the drastic change, which overall is either less apparent, or sometimes not visible at all in the other two graphs comparing only one variable at a time. Without considering representing these interactions overall data may become misleading or even entirely incorrect.

Estimated Marginal Means of Attractiveness





