

VassarStats for Statistical Computation  
<http://vassarstats.net/>

Dr. K. A. Korb  
University of Jos

## Correlation

- Use the Hide function to ensure the two variables are side-by-side
- **VassarStats:** Basic Linear Correlation and Regression
  - Data-Import Version
- Copy both variables at the same time
  - Paste into *Data Entry*
- Check the two-tailed p

## t-test

- Sort data by the independent variable
  - Use Hide to ensure the two variables are side-by-side
  - Use color fill to note the difference between the two levels of the independent variable
- **VassarStats:** Two-sample t-test for Independent Samples
  - Click Independent Samples
  - Copy and Paste the Dependent Variable into Sample A and Sample B
    - Remember which level of the independent variable is A and B!
- Check the two-tailed p

## One-Way ANOVA

- Sort Data by the independent variable
  - Use Hide to ensure the two variables are side-by-side
  - Use color fill to note the difference between the levels of the independent variable
- **VassarStats:** One-way ANOVA
  - Enter number of samples (levels of the IV)
  - Click Independent Samples
- Copy and paste the Dependent Variable into Sample 1, 2, 3, etc.
  - Ensure you remember which level of the IV corresponds to which Sample
- Check the p

## Factorial ANOVA

- Sort Data by the independent variables
  - Use Hide to ensure the three variables are side-by-side
  - Use color fill to note the difference between the levels of the independent variables
- **VassarStats:** Two-way Factorial ANOVA for Independent Samples
  - Enter number of rows and columns in analysis (level of each IV separately)
  - Click Setup
- Copy and paste the Dependent Variable into the appropriate row and column
  - Ensure you remember which level of the IV corresponds to which Sample
- Check the p for the Interaction Effect (rxc)
  - If the interaction effect is not significant, check the p for the two Main Effects (Rows and Columns)

## ANCOVA

- Sort the data by the independent variable
  - Use color fill to note the difference between the two levels of the independent variables
- Use the Hide function to ensure the pre-test (CV) and post-test (DV) are side-by-side
- **VassarStats:** Click on the number of groups for data import (k=2, k=3, or k=4)
- Copy and paste the pre-test and post-test together
  - Paste into Sample A and Sample B by levels of the IV
- Check the p

## Chi-Square

- Calculate the frequency of participants in each group in Microsoft Excel using *countif* or *countifs*
- **VassarStats:** Click on Frequency Data
  - Click on Chi-Square, Cramer's V, and Lambda
  - Select the number of rows and columns
- Enter the observed frequency in each column
- Check the chi-square