**What is this test used for?**

A chi-square test tests if there is a statistical relationship between two categorical (nominal or ordinal) variables. Answers the question of whether two variables are related or not.

H0: There is a relationship between VARIABLE A and VARIABLE B.

H1: There is not a relationship between VARIABLE A and VARIABLE B.

**Assumptions**

1. There are two categorical variables. Variables must be nominal or ordinal; however, it is better to run a Spearman Correlation if you have ordinal variables.
2. Observations in each cell are independent. This test will looks for a relationship *between* individuals on these variables, not *within* individuals.
3. All cells should have expected counts greater than five.

**Interpretation**

1. Look at Pearson Chi-Square value and significance value (the *p* value).
   1. If the *p* value is less than your alpha level (normally .05), then you reject your null hypothesis.
   2. If the *p* value is larger than your alpha level (normally .05), then you fail to reject (or you accept) your null hypothesis.
2. Look at Phi value and significance value (*p* value).

**Reporting**

A chi-square test for association was conducted between VARIABLE A and VARIABLE B. All expected cell frequencies were greater than five. There [was/was not] a statistically significant association between VARIABLE A and VARIABLE B, χ2(*df*) = [chi-square value], *p* [< .05 OR > .05]. There was a moderately strong association between VARIABLE A and VARIABLE B, ɸ = [Phi value], *p* [< .05 OR > .05].

**Effect Size Test**

Odds Ratio; Phi or Cramer’s V