**Chapter 18**

**IO 519 Statistics**

**Lab 11** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Chicago School of Professional Psychology**

**Task 8**

Certain editors at Sage like to think they’re a bit of a whiz at football (soccer if you prefer). To see whether they are better than Sussex lecturers and postgraduates we invited various employees of Sage to join in our football matches. Every player was allowed only to play in one match. Over many matches, we counted the number of players that scored goals. The data are in the file **Sage Editors Can’t Play Football.sav**. Do a chi-square test to see whether more publishers or academics scored goals. **We predict that Sussex people will score more than Sage people.**

*Open* ***Sage Editors Can’t Play Football.sav*** *in SPSS.*

Data🡪 Weighted Cases

* Select *weight cases*
* Drag **Frequency** into frequency variable
* Select **OK**

Analyze🡪 Descriptive Statistics 🡪Crosstabs

* Select **Job** and drag into rows
* Select **Did they score a goal?** into columns
* Select *Exact*
  + Check *Exact*
  + Check *Time limit per test*
  + Enter *5* minutes
* Select *Statistics*
  + Check *Chi-square*
  + Check *Contingency coefficient*
  + Check *Phi and Cramer’s V*
  + Check *Lambda*
  + Select *Continue*
* Select *Cells*
  + Check *Observed*
  + Check *Expected*
  + Check *Row*
  + Check *Column*
  + Check *Total*
  + Check *Round cell counts*
  + Check *Compare column proportions*
  + Check *Adjusted p-values*
  + Check *Standardized*
  + Select *Continue*
* Select *OK*

1. Looking at the crosstabulation table, how many people scored goals? Copy and paste graph (pg 741).
2. How many people scored goals from Sage Publications? From Sussex?
3. Has the expected frequencies assumption been met? How do you know? (top of pg 741).
4. What does the Pearson’s chi-square test examine? (pg 742)
5. Is our chi-square test significant? (\*Remember! We made a specific prediction that Sussex people would score more goals than Sage people. This means we will half our significance value because it will be one tailed. Remember back many moons ago that when we make a specific prediction we use one-tailed significance.)
6. Will we accept or reject our hypothesis that the variables are independent? (pg 742)
7. What do our significant results indicate? Who is better at scoring in football? (pg 742)
8. Using the crosstabulation table, compute and interpret the odds ratio. (pg 744-645)