**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Week 12 Lab: Factor Analysis on Fantasy Football Survey Data**

Start by opening SPSS.

1. You’ll find “IBM SPSS Statistics” in Programs >> Analysis & Modeling >> Statistics-Math

Now open the survey dataset.

1. Download from Oncourse >> Resources >> LAB WORKSHEETS >> Week12\_SurveyResults.xlsx
2. In SPSS, open the XLSX file.

Run PCA on the survey dataset.

1. In the Analyze menu, go to Dimension Reduction >> Factor…
2. Select all the variables \*except for\* the top three. Leave the Selection Variable empty.
3. In “Descriptives…”, select Coefficients under “Correlation Matrix”
4. In “Extraction…”, select the Scree plot checkbox.
5. In “Rotation…”, select Direct Oblimin.
6. In “Scores…”, select the Save as variables checkbox.
7. In "Options…" check "Suppress small coefficients" and put the absolute value at .2.
8. Back on the main “Factor Analysis” window, click “OK.”

We’ll walk thru the output together in lab.

Thought questions (that we’ll discuss in lab):

1. This project was motivated by someone’s Master’s thesis at Hawaii Pacific University, and this person claimed that there were 5 relatively independent factors that underlie most of the variance in people’s motivations to play fantasy football:
   * Showing the world you know football
   * Bragging rights
   * To make money
   * To cure boredom
   * To compete

Would you agree with this person’s conclusion that these are independent factors?

1. Of the factors that you observed, how would you determine whether any individual factor is more predictive of someone’s amount of time playing fantasy football?
2. Do people who play fantasy football for leisure also play to cure boredom?