Assignment #3 (SPSS) **Chi Square**

Statistics are used much like a drunk uses a lamppost:
For support, not illumination. – Vin Scully

Name: _____ Due: One week from today

A researcher wondered if there was any underlying pattern among people who prefer their toilet paper to hang over the top or back against the wall. He suspected that one of these preferences might reflect a higher-than-usual degree of fastidiousness (that is, he wondered if it might indicate a mild OCD compulsion toward neatness). He collected data from a large group of college students (**n=433**) about their toilet paper hanging preference as well as how they preferred to use it to… complete their toilet transaction (bunched vs. folded wipe).

Observed Frequencies	**BUNCHED**	**FOLDED**
OVER TOP	**139**	**201**
UNDER BOTTOM	**31**	**62**

Part I

Create an SPSS data file ready to be analyzed (C1 = HANG, C2 = USE, C3 = DATA). YouTube, in-class questions, and email are your help options (unless you purchased the recommended text, then you have that too).

Option 1: Enter in every score (i.e., **433** rows of data) [enter "1" for each row in the data view table].

Option 2: Enter in totals for each cell (in the data view table), then: Data → Weight Cases → Select variable to weight (e.g., "DATA" if you used my labels above) → OK

Part II

Use SPSS to calculate a Chi Square analysis (test of independence) of the data.

Specifically, you should be able to complete the following summary information from the SPSS output. **DUE: One week from today at the beginning of class!**

Test of Independence: Analyze → Descriptive Statistics → *Crosstabs + (row/col) → Statistics + (chi square) → Continue → OK

*Under "cells" you can get expected frequencies (counts).

In this table, rounding to 1 decimal place is sufficient.

EXPECTED COUNTS	**BUNCHED**	**FOLDED**
OVER TOP	_____	_____
UNDER BOTTOM	_____	_____

For statistical outcomes like χ^2 and p, rounding to 2 decimals is sufficient, 3 is better, 1 is not enough.

Pearson Chi-Square (χ^2) =

χ^2 = _____ (*Value*) df **1** p = _____ (*Asymptotic Significance (2-sided)*)