**Statistics for the Social Sciences**

**Assignment 5.3**

Recall that in your last assignment you were asked to:

*“Devise and discuss a hypothetical research situation involving a policy decision wherein your supervisor asks you to evaluate something “scientifically” using data collected from a sample of agency employees. The “something” should consist of a variable that represents a current practice and a proposed new practice such that you have an “experimental group” and a “control group.” The control group can be doing nothing (such as when you don’t have a Neighborhood Watch program and are considering adding one), or it can represent the status quo (such as when you are considering moving from 10-hour shifts to 8-hour shifts). In your discussion, consider the possibility of finding a statistically significant difference, and also consider the possibility of not finding a statistically significant difference. What is the probability of being wrong in both cases (these will be general terms from the reading, not actual numbers)? How do statisticians refer to each of those four possible situations. What are the practical problems (impact on your agency) that arise if you are wrong in making your statistical decision? How does that inform your choice when setting the alpha level for your experiment?”*

Given the scenario you described in that assignment, describe (in an essay of 150 to 300 words) how you would increase the power of your study in three different ways that align with the three factors discussed in the reading.