**INSTRUCTIONS**:

Enter the data for the two datasets into SPSS. Be sure to enter value labels for the qualitative variables. Your responses MUST BE TYPED and you must follow all other instructions or I will deduct up to 4 points from your final grade for the assignment. Be sure to hand in your typed responses to the questions below as well as your SPSS output. Note that for all hypotheses, use  = .05. Remember that in SPSS, you will compare the *p*-value (indicated as sig. in your SPSS output) to to determine whether or not to reject the null hypothesis.

Each analysis is worth 5 points (5 points at 4 analyses = 20 points total). Each question within each analysis is worth 1 point.

1. For each research question,
   1. Determine the appropriate statistical test
   2. Complete the following steps of hypothesis testing
      1. Formulate hypothesis (write out in symbolic form)
      2. Run the relevant statistics
      3. Decide whether to reject or accept the null hypothesis
      4. Write a sentence reporting your findings

DATASET 1:

You are asked to analyze the data for a small business owner who has conducted a study to look at factors that may affect work performance (i.e., typing accuracy) and job satisfaction among a group of 15 administrative assistants. Typing accuracy is assessed using the number of words typed correctly in 60 seconds. Employee satisfaction is assessed using a 0 to 100 scale where 0 = not at all satisfied and 100 = completely satisfied with their job. He is particularly interested in looking at the effects of a flex-hours plan on his outcome measures. In the flex-hours plan, employees are allowed to choose when they work as long as the total hours worked is at least 40 in a 7 day period. The employer wants to answer the research questions, below. Note that each research question will need to be tested using a different statistical test.

1. Does implementing the flex-hours plan improve typing accuracy. In the past, administrative assistants in the company typed an average of 55 words correctly in a minute.
2. Who types words more accurately, males or females?
3. What is the impact of the flex-hours plan on employee satisfaction?

The employer administers a baseline measure which assesses gender and employee satisfaction. He implements the flex-hours plan and after 30 days, assesses employee satisfaction again. He also has the administrative assistants complete the typing accuracy test. He has collected the following data (the SPSS variable names for each variable are in parentheses):

|  |  |  |  |
| --- | --- | --- | --- |
| Gender (Gender)  Male = 1; Female = 2 | Pre-Satisfaction Measure (PreSat) | Post-Satisfaction Measure (PostSat) | Typing Accuracy  (Perform) |
| Male | 45 | 55 | 45 |
| Male | 80 | 80 | 50 |
| Female | 68 | 72 | 65 |
| Female | 72 | 70 | 70 |
| Female | 30 | 50 | 64 |
| Male | 50 | 45 | 70 |
| Female | 44 | 55 | 63 |
| Female | 59 | 58 | 80 |
| Female | 47 | 80 | 78 |
| Female | 55 | 85 | 50 |
| Male | 75 | 90 | 48 |
| Female | 25 | 55 | 81 |
| Male | 40 | 53 | 57 |
| Male | 42 | 50 | 50 |
| Female | 35 | 45 | 75 |