

## SPSS Output Generation Practice #1

A researcher is interested in studying the effects of a new drug on pain and mobility in people suffering from joint pain. A sample of 10 participants complaining of chronic knee pain are collected from a sports medicine clinic and invited to participate in the study. Participants are randomly assigned to the drug group (condition = 2) or the placebo group (condition = 1). Along with indicating their age in years, and gender (1 = male, 2 = female), participants rate their knee pain and knee mobility one week after taking the drug or the placebo on a daily basis. Participants rate knee pain on a scale ranging from 1 (no pain) to 10 (extreme pain). Participants rate mobility (i.e., ease of leg movement at the knee) on a scale ranging from 1 (no mobility) to 10 (complete mobility).

Here is the data provided by the 10 participants.

### **Drug group participants:**

1. female, age 65, pain = 5, mobility = 8
2. female, age 45, pain = 3, mobility = 9
3. male, age 61, pain = 4, mobility = 9
4. male, age 36, pain = 5, mobility = 8
5. female, age 44, pain = 3, mobility = 10

### **Placebo group participants:**

1. male, age 45, pain = 8, mobility = 3
2. male, age 57, pain = 9, mobility = 2
3. female, age 55, pain = 7, mobility = 2
4. female, age 42, pain = 7, mobility = 1
5. male, age 38, pain = 8, mobility = 3

1. create an spss data file with the five variables: condition, gender, age, pain, mobility, label all variables appropriately, and enter the data. Save the file to your timmy drive using your last name.spss1data as the name of the file (e.g., myers.spss1data). After you have saved the file to your Timmy drive, you will email it to erin.
2. Calculate the means and standard deviations for: age, pain, and mobility for all 10 participants.
3. Create a new variable called stiffness, by reverse scoring mobility ratings. So, if mobility = 10, stiffness = 1, and if mobility = 9, stiffness = 2...and so on until all 10 possible values on mobility have been reverse scored for a new variable called **stiffness**. Calculate the mean and standard deviation for stiffness.
4. Create a composite variable that is the total of pain and stiffness. Name this composite variable **discomfort**. Report the mean and standard deviation for discomfort.
5. Use the select if command to calculate the mean and standard deviation for discomfort for the drug group and the separately calculate the mean and standard deviation for discomfort for the placebo group.
6. Graph the mean discomfort ratings for males and female in both the drug and placebo groups using a clustered bar graph. This graph, therefore should have 4 bars (male and female for drug, and male and female for placebo).