

MGT 9050  
Project #2

Prior to running analyses, you will need to manipulate the HR data a bit.

- Create a new variable that reflects monthly income and add it to the data set as a new column.
- Compute age for each employee based on the *DOB* variable. Add this to the data set as a new column.
- Apply the codes to the *PerformanceScore* variable and verify that you get the same values as those that appear in *PerfScoreID* variable.

### **ANALYSES**

Compute simple descriptive statistics for the *Salary* variable. In addition, produce a visualization of the frequency distribution of *Salary*.

1. Report the descriptive statistics along with the frequency distribution and provide a detailed interpretation of how you would characterize the salary variable.

Standardize the *Salary* variable.

2. Which employee (ID number) has the largest z-score on *Salary* and what is the z-score for this person? Which employee (ID number) has the smallest z-score on *Salary* and what is the z-score for this person?
3. Compute descriptive statistics for the standardized *Salary* variable. Report your results and produce a frequency distribution for the standardized *Salary* scores. Compare this distribution to the one you produced in Question 1. Are they the same or different? Explain using both your graphical results and words.
4. Compute descriptive statistics for the monthly salary variable you created at the beginning of this project. Report your results and produce a frequency distribution for these scores. Compare this distribution to the ones you produced in Questions 1 & 3. Are they the same or different? Explain using both your graphical results and words.
5. Take the square root of the *Salary* variable. Compute descriptive statistics for this new variable. Report your results and produce a frequency distribution for the square root scores. Compare this distribution to the ones you produced in Questions 1, 3, & 4. Are they the same or different? Explain using both your graphical results and words.

Compute simple descriptive statistics for the *PerfScoreID* variable. In addition, produce a visualization of the frequency distribution of *PerfScoreID*.

6. Report the descriptive statistics along with the frequency distribution and provide a detailed interpretation of how you would characterize this variable.

Standardize the *PerfScoreID* variable.

7. Which employee (ID number) has the largest z-score on *PerfScoreID* and what is the z-score for this person? Which employee (ID number) has the smallest z-score on *PerfScoreID* and what is the z-score for this person?
8. Compute descriptive statistics for the standardized *PerfScoreID* variable. Report your results and produce a frequency distribution for the standardized *PerfScoreID* scores. Compare this distribution to the one you produced in Question 6. Are they the same or different? Explain using both your graphical results and words.
9. Square the *PerfScoreID* variable. Compute descriptive statistics for this new variable. Report your results and produce a frequency distribution for the 6 & 8. Are they the same or different? Explain using both your graphical results and words.